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Lecture 36th

I mentioned in our Pathology that the proximate cause of fever would come most properly under the Practice of Physic. We shall therefore consider that subject in our Lectures on Practice.

When speaking of Therapeutics, I mentioned that but one action can exist in one system at the same time. I divided the body into several Systems; The Arterial, Nervous, in which I include nerves Brain and Muscles, or also the Mind; the Alimentary Canal, in which is included Stomach and Bowels; the Lymphatics; the Surface of the body, or all parts possed of the Sense of Touch &c.

In our Lectures on Practice, I shall treat of Morbid Action, as it appears in each of the Systems in one of the six different forms it was mentioned. Spasm Stehing &c. I said that disease frequently affects more than one of the Systems at once, and that their appearance and Symptoms are much influenced by a variety of circumstances, of Temperament

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Age, State of Society &c.&c. and that the opposite relation ships of them were thus destroyed. Instances of this I shall occasionally mention, & we shall pass from System to System in order.

That these Systems do exist in some measure independantly of each other, and are affected separately (tho' they from Sympathy are frequently all diseased at once) I infer 1st. because we see disease exist in one of them, as the arterial, when all the others are free from disease, and in some cases disease passes from one into another system, as in Small Pox. 2d. From observing the action of Medicine. Here I stated you acted Specifically on the different Systems; thus Bark affects independantly the Arterial System; Gentian & Colombo exclusively the Stomach and Bowels. Bark never would cure Dispepsia, nor Gentian and Colombo a fever. Asafoetida acts on the Nerves: Bark accelerates the pulse, but Asafoetida does not unless in a very feeble degree. Again Asafoetida is proven to act Specifically on the Nerves, by observing the Phenomena of Disease. In Hysteria 2 or 3 grains will do wonders; whereas when the nerves are not excitable as in Typhus Fever, half a drachm of it will produce

very little effect. Oil of Amber acts Specifically on the Muscles. Stramonium acts Specifically on the Brain, Champaine Wine also, one bottle of this exhilirates the Spirits more without Intoxication, than 6 of other wine Mercury and Sulpher appear to act Specifically on the Lymphatics. Certain Aliments act exclusively on the Alimentary Canal.

But there are Some medicines that act on more than one of the Systems; as Volatile Salts on the Nerves and Arteries, quickening the Pulse. Some act generally on all the Systems: In this respect Opium has the preeminence over all the other Stimuli; it acts at the Same time on all the Systems. It Stimulates the bloodvessels, as is seen by the Pulse, which, if it does not in every case quicken, it renders it Stronger. It acts on the Nervous System, easing pain, and procuring Sleep. It acts on the Alimentary Canal, and is used in Stomach & bowel Complaints, as Vomiting & Diarrhoea. It acts on the Viscera in general, increasing So example the flow of Urine. It has an action on the Skin, producing Itching. It acts on the Brain producing Congestion Delirium &c. And lastly it

has a most powerful Operation on the mind, hence called Medicina Menti.

3dly. I infer their existance in the Body from observing that excess or diminution of excitement in any one of them, removes disease from others. by Metastasis, as Tetanus, which, a Nervous or Muscular disease, is cured by a violent Arterial ~~extensive~~ action.

Thus, I think the Unity of Action established.—

Truths, like matter are indescribable; they may be obscured for a time, but sooner or later they will become visible and useful. I have been led to compare them to Mr. Addisons account of some Sailors (in his Spectator) who came so near the North Pole, that their words froze as they came out of their mouths; and they thawed again as soon as they arrived in a warm climate, so that not a single word was lost. In like manner Truths will never perish.

Lyra Celtica

I shall begin the Practice of Physic with the Diseases of the Arterial System, as this is the most Universal Species of Affection, and as the Arteries extend to almost every part of the body System. They are as it were the Out Ports of the System. They terminate in every part of the body, and are ready to receive impressions at any time, from the debilitating causes that have been enumerated.

In conformity to a custom of Practical Writers, I shall call the Disease of the Arterial Fever. This term is however, improper, as in many cases, there is, not only no preternatural heat, but more coldness than in Health.

What is the Proximate Cause of this Fever? On this Subject many Opinions have prevailed. I shall merely mention a few of them without entering into a discussion of them. Dr Boerhaave supposed the Proximate cause of Fever to be Morbific Matter in the System. Many facts occur to dispute this Idea. Fevers come on and go off, without being able to perceive morbid Matter taken in or emitted from the System. That Morbific Matter acts as a cause

of Disease, I believe, but it is the Remote Cause, as in Marsh Miasmata. Boerhaave & his followers suppposed the buffy blood which they drew to be an evacuation of Morbific Matter; but this which they mistook for the Cause, is clearly the Effect of Diseased action. Also the Sweats which they supposed are the Operations to Expell Morbific Matter, is a Consequence of the Disease. And the Sediment in Urine &c. The application of this Theory to Practice is pernicious; we must wait till Nature has performed the process of Concoction, instead of Stagnating the disease in its Formation.

Critical Days, as the 3d, 5, 7, 9, 11, 14, 17, & 20th &c. are according to Hyppocrates; hence the followers of Boerhaave exhibited Vomits, Purges & other evacuations at these times.

After Dr. Boerhaave, Hoffman, and after him Cullen supposed the Proximate Cause of Fever to be Spasm; This Spasm they supposed to occur in the extreme vessels; but many cases of fever come on and subside without any Spasm. Where it does occur, it is to be considered as a Symptom or effect, rather than the cause of Disease.

Dr. Browns Theory places the Proximate Cause of Fever in Debility; but I think I have sufficiently established that debility is merely a predisposition to Disease; of course the Proximate Cause cannot consist in Debility, for the Strength of the Bloodvessels is increased in many cases increased to 10 or 20 times more than was natural. It is astonishing that Dr Brown can have thought of placing the Proximate Cause of Fever in Debility.

My Theory of the Proximate Cause of Disease, places it to Consist in a Preternatural degree of Excitement, occuring in one of the Six forms already mentioned. In disease of the Arterial System, this consists as occurs primarily in form of Convulsion. All the argument in proof of this opinion of the Proximate Cause of Fever, you will find detailed at full length in my 4th Vol. of Med. Eng. and Observ. which I will read / this done which exhausts the hours of lecturing / and at our next Lecture I shall proceed to treat of the Cure of Fever.

Lecture 37th

Cure of Fever.

Before I proceed to treat of the ~~the~~ mode of curing the different States of Fever, I shall proceed to say a few words on the Cure of Fever in General. (For what was said in this Lecture, See Dr Rush's 4th Vol. Page 184.) It consists principally of a defence of Bloodletting in the Cure of Fever.

Lecture 38th

consists of a continuation of this Defiance Good Side.

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Lecture 37th.

Cure of Fever Continued.

Having at our last Lecture concluded the advantages of Bloodletting over every other mode of depletion, I proceed next to speak of the other Evacuants. These are 2d. Vomits 3d. Purges, 4th. Sweating medicines, 5th. a Salivation, & 6th. Blisters.

I shall begin with vomits. In these as in other Evacuants, I shall now confine my self to a few general directions, about the proper time of using them, and under what Circumstances to derive the utmost advantage from them; having, when speaking of bloodletting mentioned the ill effects which have attended the improper administration of them all.

Vomits are proper only in diseases of Feeble morbid Excitement action, or in some cases of Scarlatina Anginosa and Pulmonic affections. They are safest when given to Children; in some adults they produce Ruptures, Hemorrhage of the Stomach &c. It is difficult to

hurt Children with vomits, and they may be, in some cases substituted for bloodletting, where we cannot do this: In old age they may also be useful; but in cases where there is a predisposition to Cephalic affections, they should be carefully avoided. To be effectual, they should be used one or twice a day, and be continued for several days. In this respect they resemble bleeding; one alone is seldom sufficient. I have compared the exhibition of a single Emetic, to an Indian, who having heard much of a Feather bed, laid a single feather down on a Rock, and laid himself down on it to sleep; he awoke in the morning with his bones aching, and declared he thought a feather bed harder than the Earth.

Cholera Morbus .....

Dr Cobham of N. Carolina, who practiced 20 or 30 years ago, used to cure the Bilious Fever by means of Emetics; in those cases of the most malignant kind, he continued Puking his patients for 2 or 3 days vigorously. His practice was very successful; but copious bleeding would have prevented the necessity for this

Barbarous remedy. Dr Thomas of Maryland, I have been informed, cures Yellow Fever by means of Emetics; 2 or 3 grains of Emetic Tartar with 20 grains of Calomel; but bleeding would answer every depleting purpose; and it was purely for depleting that Dr Cobbam used it. He used to say his Patients could not get well till he was so reduced that he could not move in bed; "down with his System!" "weaken him as much as we can"!— now bleeding would have reduced the System much quicker, and with much less pain to the Patient. However, when Vomits are used, this is the manner to use them in Malignant Fevers which often degenerate into Cholera Morbus. Vomits in the forming State of Fever frequently remove it by exciting action superior to that of the Disease. The best Emetic I am acquainted with, is the Tartar Emetic: it should be used in small doses and repeated, and as little drink after them as possible: they meet with Blood enough in the Alimentary Canal, the bile and contents of the Stomach which they evacuate. In prescribing Vomits, remember the directions given with respect to bleeding; never to be guided by any thing.

best the State of the System.

The 3d article under our first general head is Purges. These are very proper and highly necessary in Bilious Fever, and are more useful than Vomits. They act besides their Evacuant power, by creating an artificial weak part in the intestines, and so invite from the arteries. When they are wanted of mild operation, Salts, Jalap, Cream of tartar &c. &c. may be used. More active purges are Scammony, Calomel, Gamboge &c. these in small quantity are very active.

4th Sweats. These may be procured first, by sweating Medicines. These act as Stimulants, and are improper in Fevers of much morbid action, when used in such they do much harm. Secondly, the object may be attained by diluting drinks; these must be taken in large quantity: they act simply by distension; they are seldom effectual. Thirdly, by Nauseating Medicines: These are very disagreeable, but much more certainly produce than the other methods. The Patient can seldom be prevailed on to use these, or at most for a short time only. Fourthly, by means of the Warm Bath. This acts powerfully as a Sudorific, when it succeeds; when it fails, it does harm. The French

Physicians in this City, used it very often during the Fever of 1793, and with some Success, in cases of Morbid action; it is, however, a very difficult remedy to apply, especially during the prevalence of an Epidemic, on account of the want of attendants and other conveniences. Fifthly, the Cold Bath. This has been Known to produce Sweating, indirectly; Where it does not produce this effect, it tends to lessen morbid action. Sixthly; by means of great weight of bedclothes; this is the best method; it was introduced into practice by Dr. Sydenham, when he was prevented from exercising the Lancet to sufficient extent in Fevers. It answers where morbid excitement has been used by previous depletion. Another method is more in use of sweating; it was used by Dr. Physic and myself in the City Hospital with great Success: It consists in in making use of heated bricks wet with Vinegar or warm water and placed in the patients bed; also applying a warming pan over the Patients bed cloths, and between the blankets, and moved about till he becomes hot warm and Sweaty. This method was mentioned to me by an old Sailor, & answers very well; either method should not be continued too long, from 4 to 6 hours, and repeated twice

a day; to be useful it should be thus alternated; or — else, if the patient bears it, continue it for a longer space of time, even 24 hours.

The linnen should be changed often during the process, and always be changed after it is stopped.

I have already mentioned the uncertainty and difficulty of this mode of depletion; Why then denounce the more certain, effectual and delicate Evacuation of Bleeding? which may be done in any proportion, time or place we please.

5th Salivation. This depletes in a very feeble degree. 2d. It operates especially by revulsion. It may be performed in several ways; First, by exhibiting Mercury internally, in the dose of from 2 to 10 grains 3 or 4 times a day; Second, by friction with Mercurial ointments. Thirdly, by rubbing the gums with Mercury, as recommended by Dr —— Fourthly, by means of Mercurial Sacks: this is Mercurial ointment Spread on linnen, & laid in the Stockings of the Patient.

Salivation, produced in any or all the above methods, is the most unpleasant method of depletion. — Its ill effects I formerly mentioned; it is more uncertain than any other method of depletion.

It frequently does not produce a discharge of Saliva, but affects the gums and swells them. 2d. It acts on the teeth and loosens them, rendering them also carious. 3d. It acts on the teeth and Tonsils, ulcerating them; and in many cases, all these circumstances concur without without — Salivation. It is rendered less objectionable by bleeding; it should only be used when this is objected to ~

Blisters. They are the weakest of all Evacuants. They only abstract the Serum of the blood; They should never be used in cases of much morbid action without Local affection, and then only on the part affected — They have terminated in Gangrene when used without this precaution, and Death in some cases before bleed=ing come to be used. ~

From what has been said of the substitutes for Bloodletting, we find them all inferior to it. It is not only the most powerful, but at the same time the safest evacuation we can use. It offers no violence to the System, none to the Senses. Whilst not a single case scarcely on record of Death from improper use of bloodletting thousands have happened from the ill timed use of vom=it, Purges, and all the other evacuating Remedies. Even

II. We proceed to our next General Head, Viz. Such Medicines as act by abstracting Moral Stimuli. 1st. of such as abstract the Stimulus of Heat, as Cold Air, Cold Water & Ice. Of the Stimulus of Blood by Abstinence. Of Sound & Light by ~~obs~~ Silence and Darkness. Of the Invigorating Passions of the Mind, by moderate Fears. Of Motion, by Rest. And of Decimony by Diluent Drinks and Cleansings. 1st. Such as abstract Heat. Cold Air acts in this manner. It is used much in Small Pox. (early). It might be used with equal propriety in all cases of Fever of great Morbid action indiscriminately. It however does much harm in those cases of Malignant Fever, in which the Powers are prostrated below the point of reaction, when there is a preternatural Heat. 2d. Cold Water, may with equal advantage be applied to the Skin either by Cold Bath, or simply by wet Cloths; in both ways it acts in the same manner. It lessens the frequency of the pulse. It is in no other manner that Vinegar acts, but by its temperature. 3d. Ice. acts more powerfully than the other two, in as much as it abstracts more heat. This is much used in great morbid action in the Head. Where headache occurs in violent Fevers this is a most excellent application. The mode of applying it is to pound the Ice, and fill a bladder with it; this

is to be placed over the Patients head, and when it is fused more must be applied.

Abstinence. This should be used in all fevers. The stimulus of Fever is sufficient to preserve Life with out little food. Your Patients Stomach must be filled with something or he will complain; else Solid food is wanted, of which none is equal to Roasted Apples. As in prescribing bleeding, Vomits &c. you are regulated by the State of the pulse, so you should be in prescribing Abstinence. Your Patients appetite should not be trusted where there is a moderate degree of morbid excitement in the Brain. Rest and abstinence should be conjoined.

Fear, should be moderately used; by letting the Patient know the danger he is in, will have a good effect.

Silence & Darkness, act also as Sedatives. Conversation, and even the Sparkling of the fire has done harm in affections of the Brain.

Abstracting the Stimulus of acrimonies by Diluting drings. That acrid matter is discharged in this way is rendered probable by what Dr..... says that Mr. Moore a Chemist of his acquaintance, who found that by examining the Urine of a person in health; the former contains $\frac{29}{30}$ more of Saline matter than the ~~former~~ latter. The quantity examined

was to quite. Diluent Drinks should be given as well where there is no thirst as where there is. They are Lemonade, Tamarind water, Jelly water, Toast and water, Balm tea, Apple water; Barley water is not so good, as it too much nourishment. Apple water is best when prepared with raw Apples.

Cleanliness should be carefully observed: the linnen should be changed frequently, the teeth and mouth cleaned, & also the feet with Soap and water.

III. The next General head includes such Medicines as act by diverting Local Congestion, or Inflamation and Serous effusions, from Vital parts, to such as are less immediately connected with life. These are Evacuants & have been already spoken of under our first Head. All that has been there said will apply here.

IV. Such Medicines as are said to possess a Sedative power; as Fox Glove, Nitre, the preparations of Antimony of Lead &c. I say such as are said so to act; I do not believe there exists a direct Sedative, excepting the abstraction of Stimuli, as Venesection, Cold &c. — These Medicines act Indirectly. I prefer Nitre; it may be given in the doses of from 10 grains to a Scruple, 3 or 4 times a day. How do these Medicines act? I answer by

exciting action in the Stomach and Bowels Alimentary canal which lepers stock of the disease; they should therefore be = given in such doses as to nauseate. They are only used to excite a Centrifugal disease, and then remove the Centripetal, or that connected with the Vital parts: hence I would use them in affections of the Liver, Spleen, & Viscera; but not in Rheumatism. In the Lungs there is an outlet, and of course not so dangerous. Ascites is a Centripetal disease, of course they are of but little service there, but of great service in Anasarca. Sweet oil has been used externally as a Sedative: it has been principally used in Local affections, in which it certainly takes down morbid action. Piso, in his account of Spain, mentions that the Antient inhabitants of Brazil, used to cure some diseases by anointing the body of their Patients with Sweet oil: and it has lately been used with advantage in the Plague.

Are there no other modes of taking down morbid action? I answer yes: they are in the first place powerful Frictions. These act without any depletion. Capt. Cook mentions in his voyage to one of the Friendly Islands, that he was seized with a violent fit of the Rheumatism, which was cured

by one of the Natives, by rubbing ~~it so violently~~ by rubbing the affected limb in so violent a manner as to give him great pain. 2d. The Indians have a mode of curing Pleura=sy, by suspending the Patient by his arms over a Bough or limb of a tree, till the morbid action is reduced: the arm of the affected Side is used for Sixty or Seventy hours or more. The Patient is almost always ~~recovered~~ relieved. The hot and cold Bath would probably answer the same purpose. Another Indian Remedy is mentioned by Dr Bacon. It consists in the sudden variation of the temperature induced in the Patient. He first goes into a Bania, which is a Kind of Oven, having one door large enough to admit the Patient, and another of Suppercent Size to admit the introduction of hot Stones, and at the same time it serves to let in fresh air. In the winter when Dr Penn saw the remedy used, the Patients wife cut a passage for the husband while he was in the hot oven, thro the Ice and Snow to the bank of the River, about 40 paces distant; and there cut a hole thro the Ice, where the Patient descended up to his .... running in sweat from the Bania. He next went back to the Bania again, where he remain=ed till he put on some dry clothes; then proceeded

home to a very bad [illegible] the fire, perfectly cured his complaint. This was in the year 1783 a remarkably cold Winter, when Dr ..... who relates the fact in a letter to Dr Bacon, was witness to its efficacy. This is an Indian Remedy, and suited only to their Robust habits of body, or Constitutions. Civilized People would not be able to bear its violent operation, and Indians have now become so relaxed as not to use it any longer. ~

All Fevers appear in one of the following original forms. 1st. Malignant. 2d. Synochus. 3d. Synocha 4th. Synochoid; 5th. Synochula. 6th. Typhoid. 7th. Typhus. 8th. Gangrenous. 9th. Hectic. 10th. Intermittent. 11th. Febricula. ~

We proceed next to say a few words on the general treatment of those states of Fever, in which there is but moderate or feble morbid action, not so much as to bear bleeding, and which of course are to be overcome by Stimulants. This is the opposite State of what was mentioned under our first heads. These diseases frequently occur (in consequence of a mixed diathesis) in form of Typhoid Fever, neither so low as typhus, and yet too little morbid action to warrant bleeding. This I shall place at a future period on a Scale

in which the different States of fever will be ranked according to their morbid actions, on a plane above typhus amongst Chronic fevers. The typhoid State of fever is called usually the "Slow typhus", to distinguish it from the "Low Typhus", or Nervous fever, of Dr Huxam, Cullen and other authors. This State of System frequently occurs in Puerperal fever; of all others it has received many names from Physicians. It frequently has been called Putrid by some, and inflammatory by others according as its symtoms vary, tending in some instances to a dangerous termination. In some cases it ends in three days in Hospitals, and in other cases it runs on to a great length of time, weeks and Months; hence the diversity among writers some advising bloodletting, and others using Bark to prevent the putrid termination. They are both in error, because they do not specify the State of the disease in which either of these remedies ought to be used. A parched tongue at the edges, a dry skin, feble yet quick pulse, & headache, distinguishes it from the Typhus Mitior, of Dr Butler and Dr Cullen. Their "Low nervous State" which terminates seldom before 30 or 40 days; it has a greater resemblance, perhaps to Chronic cases of Bilious

fever; from which it is to be distinguished by the following marks; 1st. by occuring at all seasons of the year, where-as Bilious fever prevails principally, or entirely in the hot Summer or Autumnal months. 2d. by having no Remissions or Intermissions, while Bilious fevers always have. 3d. from arising from human Contagion, and Bilious fever from Marsh Miasmata; & from being Contagious. 4th. by the Stomach and bowels being free from bile. 5th. by the little tendency to Sweating observable in these cases. —

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1st Bloodletting .. its pre When these come on an Emetic will remove them, and invite the Typhoid Knot as it were. For these and its general Symptoms, I refer you to Authors. It was from observing the efficacy of Vomits in Pulmonary Consumption, that Dr Dulcet of Paris, first prescribed it for Typhoid Fever. To be useful they should be continued for 2 or 3 days. The next remedy is Purges. 3d Nauseating Medicines. 4th Nitre in considerable quantity. 5th Blisters. — 6th Perhaps Pediluvia. This acts feebly on the

arterial, and powerfully on the Nervous System. Also Volatile Salts for the same reason. These remedies should be continued till Typhoid action almost goes entirely subsided, but not quite.

(Simile of a Milldam, very illustrative)

Having premised this, we shall proceed to Speak of the Seven States of Fever into which it is generally distinguishable. — The Typhus Mitior, The Typhoid of which we have spoken, The Typhus Gravior, or Malignant Fever — The Synochus, Synocha, The Typhus or Low . . . . . of Chronic, and the Gan = grenous. Thus last (the Gangrenous) Succeeds inflamatory Fevers of violent action which have not been sufficiently depleted, Thus in Yellow Fever Small Pox, Plague &c. it sometimes occurs — It does not depend as has been generally supposed on any original ~~Diathesis~~ Putrid Diathesis. —

The Stimuli prescribed in some cases are suffic-
-ient to Generate the Putrid Diathesis or tendency to
Gangrene. The practice of these Stimulating Physi-
cians, who Stimulate to cure these Putrid Fevers, as
they call them, resembles a Horse, who paws the bottom
of a Stream to make the water clear, and always ren-
ders it more Turbid. They first Create a Putrid Fever by
Stimulating, and go on Stimulating to cure it. Typhus
has thus been converted into Gangrenous State of Fever.

The Petechiæ we see after yellow fever, are owing to
this cause and seldom Bubboes occur after copious
bleeding. Hemorrhage, Coma &c. (For the Symp-
toms, Vide Authors.)

The Typhus State of Fever may be distinguished
from Typhoid by a greater degree of Debility, greater
quickness of Pulse, Dilirium, Coma, black tongue, dry
at the edges, and fissured, Fallen Jaw, Muttering, Spotted
pale Countenance, dry Skin. At the close of it Mania —
sometimes comes on; called by Dr Cullen Typhomania
The Faeces ..... More or less Cough. However you need
not be anxious about distinguishing the name of the
disease; no matter whether Typhus or Typhoid. The State
of the System must regulate your Prescriptions. —

Many cases of Typhus occur with almost every symptom of Typhoid.

Lecture 40th.

Cure of Fever.

The remedies for Typhus, as before mentioned, should be stimulants unless the State of the System forbids their exhibition. These are divided into external and internal. The latter are again divided into Medicines and Aliments. The Internal are all Fermented and Distilled Liquors, Aromatic & Empyreumatic Oils, Volatile Alkali, Opium, Ether, Barks, Bitters of all Kinds, Mercury, Pure air; The invigorating exercise of the Understanding and the Passions. — The Aliments include such vegetable and animal matters, as are commonly used in diet; also Salep, Sago, Tapioca &c.

The External Stimuli, are Several of the Internal

differently prepared & applied to the Skin at the Region of the Stomach and bowels, the nose Temples & Limbs — Extremities, and the Intestines by way of Glyster, also Cold bath, Warm Bath, Blisters, Cataplasms of Garlic Onions, Mustard &. Caustics and Boiling water. —

I shall proceed to make a few general observations on the proper mode of exhibition. —

I. *Of the Internal Stimuli.* Of the use of these I shall make a few preliminary observations. 1st. Begin — with the weakest Stimuli, and increase them gradually in Force — Give them in small doses and increase it gradually. 2d. Use but 1 or 2, at most 3 Stimuli at a time. 3d. Use them in Succession. 4th. Intermit the use of Stimuli; they will thus act with increased Force, (Facts in proof of which were before mentioned) — From an absurd Association of Ideas, we are apt to limit very closely our doses of Opium. This is the most difficult Stimulus. We should break this association, and use it in Typhus in large doses; perhaps as far as 5 grains — An absurd apocation prevails as to time of using it; this should be at any part of the 24 hours; tho' from Custom, we generally give it at bed time only —

the morning I should prefer to any other time, as the Syp-
tem is then more readily impressed. —

I shall now proceed to make a few observations
on each of the Stimuli. —

1st. Medicines. —

And first under this head Fermented
and Distilled Liquors. —

1st Wine. This I formerly mentioned contain-
ed Spirit, Saccharine matter, an Unfermented Sub-
stance denominated Must, Acid & Water. It
is accordingly of a nourishing as well as a very
Cordial Nature. It is also Antiseptic & Diluting.
The quantity used is to be regulated by the quality of the
Wine. The White Wines, or Sherry, Lisbon & Madeira
are the most Cordial, and may be used in the close
of from 1 to 2 or 3 bottles a day, alone or diluted with
water as the Patient likes best. These are preferable
in all cases, but must be used always in all cases
where Acidity prevails, or their component parts are
more accurately blended together. It is remarkable
that patients in this low Fever, can bear a much
larger proportion of Wine than they can do when in
health. When they could not drink above 3 or 4

glasses in health, they could drink 2 or 3 bottles a day without intoxication.— I once lost a Patient a Student of Medicine owing to his Parents being ignorant of this fact; they would not let him drink as much wine, as was necessary, for fear of sending him intoxicated into the presence of his Creator. The Red wines as Port Claret &c. are less wholesome.—

Of Malt Liquors. Porter is to be preferred, as it is less apt to be decomposed in the Stomach than the others: 3 or 4 bottles may be given a day—

Distilled Spirits. Contain no must, no Sugar or very little & much Spirit, they of course Stimulate without Nourishing. They should never be used but where the Patient has been accustomed to drink it, they may be used however when a Sudden effect is required.

Volatile Alkali. This possesses virtues in this low Fever; for which it is celebrated by Sir John Pringle as an Antiseptic. It may be given in a bolus, or pill made with flours, or Conserve of Roses (whichever form of pill is most agreable) from 5 to 10 grains every two hours—

The Empyreumatic Oils. Of these I can say little from my own experience, and that little is not much to their credit. The Oil of Amber I have used in Spasmodic

Affections of the Muscles, and in the Hiccough which occurs in Typhus, with great advantage; (dose 6 drops) The others I have not used. The Essential Oil of Mint, is principally used to keep other medicines on the Stomach. Oil of Cinnamon. - - -

on the Stomach and Alimentary canal, producing Costiveness, on the Skin exciting Sweat and Itching. In Disease I infer it, from its action on the Stomach and Alimentary Canal, Checking Diarrhoea, & Vomiting & Flatulency, when these proceed from debility; in removing diseases by a feeble action and exciting a healthy one; and lastly I infer it from its Analogy with other Stimuli, which I think incontestibly prove it. That it differs in its action from other Stimuli I grant, but to this I answer, that no two Stimuli act exactly alike. Thus Bitters act principally on the Alimentary Canal Barks on the Arterial System. Distilled Spirits on the Nervous and Arterial Systems. Oil of Amber principally on the Muscular System. Now Opium maintains an Universal Empire over all the Systems; it acts on them all at the same time: on the Brain, Nerves, Glands, Bloodvessels, Lymphatics, Muscles, Skin, Alimentary Canal, and every part of the body. The action of any of the common Stimuli may be compared to a Torch which exerts its Light only over a few in a Room; while Opium may be considered as the Sun which Enlightens all Mankind, and equally in every part of the Globe.

Accident first suggested to me the use of Opium in Typhus in the Winter of 1769-70. A Patient in this Disease, took by Mistake a table Spoonful of Laudanum for a Spoon=ful of Saline Mixture. The consequence was a profound Sleep, which continued for two days and Nights with little intermission. He breathed during this time very regular, and appeared easy and tranquil. At the end of th operation, he was very much relieved, and finally recovered. From this I took a hint, and used it in the Military Hospitals with the happiest effects. In prescribing it for the purpose of procuring Sleep, you must attend to the State of the System. It mode=rates morbid action. 10 drops of Laudanum will procure Sleep, when 50 wd. would have completely prevented it by raising the System above the Sleep=ing point. This is not sufficiently attended to by Physicians. They as frequently procure Sleep by=too much as too little Opium. Sleep, I presume observed is to be induced in two ways by opium; 1st. by rais=ing the System to the Sleeping point; and 2d. by inducing Indirect Debility. In Typhus, the latter mode is dangerous, as it may induce a determination to the Brain - 5 or 10 drops will frequently answer

as well as 300. . 2dly In prescribing Opium in Typhus, increase the dose as the debility increases. You may safely give 4 grains at night; but this increase must be gradual. It is surprising to what extent this medicine may be used, gradually increased. Dr. Baeguet of Paris, used 100 grains of Opium in a case of Colic, to retieve the pain of it. Do not use it in too small doses, it must be used as any other medicine in as quantity as is requisite. 3dly Use it during the day as well as at nights, and if your patient wakens at night in some very low Cases, it should be given. (Vide Med. Engcs. & Obs. for a case of Typhus in which Death was prevented by a dose of Opium given at Night when the Patient was wakened.) 4th In cases where Sudden exact Debility has been induced, use it Sparingly at first. Dr. Steedman in the Edinburgh Medical Essays, relates a case of Death from 30 drops of Laudanum, after the Sudden operation of a Vomit. 5th It should be laid aside for a time, when the System becomes insensible to its operation. 6th If the Stomach is insensible to its action, use it in form of Glister, it will then act very powerfully. Lastly in proportion as the Excitebility is restored, its action should be lessened.

Ether. This is a powerful, quick, & excellent Stimulus; Should be used after Opium or where Opium cannot be used. Its action is Transitory; from 30 to 60 drops may be given every hours.

Bark has many advantages as a Stimulus in this State of Fever. You Should begin with an Infusion, by adding half an ounce of infusion of Bark, to half an ounce of Huxhams Tincture, with 50 or 100 drops of Laudanum; of this a Table Spoonful may be given every hour: Its effects are increased by being thus mixed. It may be increased gradually to 6 or 10 ounces of bark per diem with Wine. Where it does not set easy on the Stomach, Gentian and Colombo may be used in its Stead; tho' they act more powerfully as Tonics, and less Stimulating. They are to Bark what Aqua Fortis is to Opium on the Nervous System.

Mercury. I place this among the Stimuli in Typhus Fever, for many reasons. In the first place from its good effects observed in Cynanche Maligna. 2dly From having seen a case where Typhus was cured in a Gentleman . . . . . Sore Mouth . . . . . Cured him. A moderate Salivation Should be excited in all tedious cases.

Pure Air. This is an excellent remedy in Typhus. In Cold Air, it is highly improper & injurious. The effects of pure air in Typhus was wonderful in the Military Hospitals during the war; and a Malignant Yellow Fever was changed into an Intermittent, by a change of Land for Sea Air, in some Sailors — Dr Trotter, Surgeon to the Fleet in his Majestys Navy, mentions in his Medicina Nautica, that a Yellow Fever which occurred on board a Squadron commanded by Admiral — Thomson, was cured by a Cruize of three weeks from a Sickly Port. Dr Dawson tells us of a similar fact of fever cured by removing from a Marshy to a Hilly Situation: For this reason large rooms with fireplaces in them are best for Patients with Typhus. But what is to be done where there is no fire place? Make a fire in the middle of the room; the Smoke will soon rise to the Ceiling and cease to offend the Eyes. The fire acts by causing a circulation in the air. And if we have a ground floor; this will attract the Contagious — Miasmata. Dr Filton first introduced this method into practice, in the Military Hospitals. It was left on Record by Count Sax, and is highly proper. Earth absorbs Poison of all sorts Kinds. It is on this account we see

Dogs which have been bit by a Snake, Viper &c. scratch a hole in the Earth, and put the wounded part into it. A German Physician has recommended another method of purifying air, by means of an Iron Tube communicating with the external air, at one end, and the fire place at the other. 3dly By Deflagrating Nitre, is another method of purifying air. The poor in China, are remarkably healthy, tho' they live in small dirty houses: This is owing to the ground floors and the Smoke. This Mr Bruce says is the reason why the poor at Masura escape the Plague, their Smoky houses protecting them. Hence we find the Cooks of Ships more healthy than any of the Crew, because they are more exposed to Smoke Mr Clark mentions the air of a small confined Room, in which 50 persons had Lived, was so purified by the deflagration of Nitre, as to become Exhilerating, by a Chafing dish containing Nitre and Charcoal being ~~was~~ burned & carried about the Room.

Next the Invigorating Passions of the Mind. These have a most powerful influence on this Slave disease. Anger has cured it in the West Indies (Case related) A Soldier at Brunswick, was completely cured last war by Terror, for fear of falling into the hands of the British Courage has done wonders in Typhus — Ease of this —

is related by Rees, in an engagement at Sea, in which the Men were all cured of Syphus. The very name of a Hero is Sufficient to accomplish much. That of Bonaparte! had such an effect on some wearied French Sailors, who were hoisting an Anchor, and could scarce accomplish it, as to enable them to lift it immediately. A piece of good news has often shortened the Crisis of Fever. Old Womans Tales and Midnight Stories, should be carefully avoided; and every circumstance which tends to depress the Patients Spirits. Hope is a Cordial of great activity; It is of consequence to keep up your Patients Spirits by accounts of persons recovering in Similar situations with himself.— But a little Idea of danger will, in many cases have a good effect; indeed I never would object to the visits of a Clergyman, as these tend to inspire hope in a future world in desperate cases, & act by creating Terror in those which are Slight.— A Clergyman informed me that whenever he went abroad to preach, he used to Study his Congregation before his Sermons: In like manner we Should consider the Age, Climate, Season of the year, & habit of the Patient before the Remedies.

Few Books written in the East & West Indies

or in Europe, are of any application to Diseases of this Climate; and he should not rely on them.

But to proceed the exercise of the Moderotendering has been useful in this disease. Calling a Patients attention to business, has frequently capacitated him to perform it. Next of

Aliments. There are Vegetable and Animal. The former comprehends all vegetables commonly used in food, together with Sago, Salep, Tapioca, & Chocolate. Animal Food. In this attention must be paid to the quality and taste. It should be pleasant to the Patient. I have sometimes cured the Typhus State of Small Pox, by suffering my Patients to indulge in Beef Steaks, and Fowls, & Ham.

Two things are to be observed in prescribing Aliment; 1st. to render it palatable to our Patient — & 2d. Take care that it be easy of digestion; but if he has no appetite, you must still prescribe it, taking care at the same time that he eat it frequently; the more meals he makes, the better. —

External Stimuli. Are Bark Wine and Laudanum to the Bowels. A very good Glyster is —

this State of Fever, is the following — Rx. Cort Peruv. ℥ss. Vinc ℥i — Tinct. Theb. gtts 60. Aq. Font. ℥iij. However — ever it will distend the Bowels and be discharged before it has produced its good effects. These remedies may also be applied on Flannel to the region of the Stomach and bowels; where they in like manner exert their good effects also to the Limbs. Other Stimulant applications may be made to the body, as the Cold and warm Bath in — which Salt has been dissolved and Spirits added. Fomentations, Cataplasms of Onions and Garlic may be applied. Some have used live pigeons split open, but this is a Barbarous remedy, and an useless one, Bread and milk of the same temperature, answer the same purpose. In the lowest Stages of the disease, when Excitability is exhausted, more Stimulants may be used, as Mustard & Pepper to the Feet; Blisters; These are frequently useful — since Dr. Brown justly stiles Blisters the Extreme Resource of Medicine. Caustics have been used with advantage; but their discharge is more unpleasant than that of blisters, which answer all their good purposes. In that State of Typhus in which there appears a disposition to Apoplexy, Syncope, or Asphixia, Boiling Water has been used with success. It raises

a speedy Blister and is a violent Stimulus.

Is it proper to sit up in this State of Fever? No, it is highly injurious; many cases have occured of sudden Death from the exertion of walking to a close Stool Chair from extreme Debility; and in one case Death occured, (or was at least hastened) by the Patient merely turning in bed.

There Should be no change of position of the body that can be avoided, except to change the Linnen and bed cloths

Are Cold drinks proper? By no means, unless in cases of local inflamation in the Stomach. In all cases of extreme debility from ~~Nervous~~ Fever, Warm drinks should exclusively be used. In the last Stage of Typhus Fever, there is a strong desire for Cold water, which may then be gratified; it depends on the last resort of excitement to the Stomach.

Is Purging proper in Typhus Fever? No, it is not, unless there is a preternatural accumulation of Bile in the Alimentary Canal; this may be discharged by a moderate Purge. A Patient is sufficiently evacuated in this Disease by one Stool per Diem; and in many cases they live for 4 days without, and suffer no inconvenience from it; the Stimulus of the Faeces, is rather of use. The Urine, however, should always be discharg

Where the Bladder is insensible to th Stimulus, which is a frequent occurrence in this Disease, it should be evacuated by a Catheter.

Is Sleep proper? I answer that Patients often die in their Sleep, in this State of Fever; they should be watched, and the pulse closely attended to. Animal life you know is in a weaker State in Sleep: If the pulse flags, he should be wakened, & Stimulii given, food or Medicine, or both. If Typhoid action however is present, sleep may be permitted.

I have now, Gentleman, an opportunity of Retracting an error published in one of My Vols of Emg. & Obs. I have there said that I had never seen a case of the Low Nervous Fever where there was bleeding used in its commencement during the presence of Typhoid action. But I now do believe in the existence of Genuine Typhus Fever, on which the Characteristics laws of it have been stamped by the hand of Nature.

From this view Gentlemen, you see the necessity there is for visiting your Patients frequently, and paying the closest attention in Typhus Fever. Indeed formerly dread being called to a Patient in this Disease, but now I am persuaded that if a Physician is sufficiently

attentive, and has an uncontrolable government over his Patient - Nay, under these circumstances, I think it - almost impossible for a Patient to die in Typhus! that is a Patient where the Constitution is good, not broken down by previous disease and Intemperance.

You must attend carefully in Typhus, 1st. To the Climate; 2d. Season of the year. 3d. Habit of your Patient; But particularly, and above all, to the present State of the System. Let the State of the System, as indicated by the Pulse &c. I repeat it again, Let the State of the System be your only Compass, from which your Eyes are never to be taken, till you arrive at the destined haven: by it you must trim your Patients Constitution, and Pilot him safe

In support of my opinion of the Originality of Some cases of Typhus, I had 20 or 30 proofs last fall, that I am convinced they came in this Fictious - form from Pandora's Box

Lecture 41st

Immediate mention a circumstance here Gentlemen which I omitted to mention under the head of Pure Air. It is to caution you against allowing your Patients in this disease, to have Curtains round their bed; also to Station the bed in the middle of the Room. This will prevent the contagious Miasmata from adhering to the walls, especially if it be Wainscoated (a fact related by Bgarky that Patients in Hospitals recover more speedily when placed in the middle of a room.) —

We have now Gentlemen conducted our Patient thro' Typhus Fever, but we must not yet forsake him. Much is to be dreaded from the excessive debility left by this disease; and Patients frequently die like General Wolfe in the arms of Victory.

The Patient in this state has a very great accumulation of excitability in consequence of the Debility. He is to be nourished with Cordials and Aliments. Aliment is to be prescribed as best —

adapted to this State of the System, in which Nourishment is required. The same State succeeds recovery from Bilious Malignant Fevers; and it may be properly considered a Disease, arising from the sudden abstraction of Fever. Convalescence consists partly of Debility and some little febrile disease or excitement. From the Debility in this State, many die after the disease is entirely removed. The consequences generally are as follow. 1st. Wakefulness. Sleep generally attends the Crisis of a Fever, but after that during the convalescence the most obstinate wakefulness attends. 2d. A vomiting in the morning, in some cases of Bile. 3d. Preternatural excess or deficiencies of Appetite. 4th. Anasarcous swellings of the legs especially, but also of other parts of the body. This is more common if bloodletting has not been carried to sufficient extent in the treatment of the Disease. 5th. Ulcerated Carotids & Sub-lingual glands from Neglect of the same remedies. 6th. Obstructions of the Viscera, the Liver Spleen &c. from the same neglect. 7th. A defect of Speech. 8th. A loss of hair or gray colour of the hair. 9th. Costiveness. 10th. Feverishness, and glowing heat on the Skin; Pulmonic congestion and Cough. A defect or diminution of

activity in the mental faculties, particularly the Memory & the Moral faculties; in some few cases the Understanding. Dr Sheldon mentions a case of a Young Clergyman who lost all his Knowledge by being attacked with a violent fever. I knew a case of a child five years old in whom it had the same effect, and the patient had to learn the A, B, C over again. In another case the memory was so affected for a great length of time, till all of a sudden, the Patient, a young man who had been engaged in reacquiring his learning, accidentally recovered it one day in reading a passage in . . . . . he instantly remembered his Knowledge, called for his Bible and read the Language as before. The Moral faculties are affected in many cases. Dr. Fitton of Delaware State, during the last war was Surgeon in the Army, and was Siezed with the Horpital or Typhus Fever; after his recovery he was fretful, peevish, irritable, passionate, and entirely a different man from what he was before the attack. I could mention many more cases, of Lying, Stealing &c. in consequence of Typhus. I knew a case of remarkable defect of Veracity, after a fit of Typhus in a young Lady, by persevering 6 months in the cold bath.

I shall mention the cure of the above Symtoms. — Wakefulness, can be relieved by cordial drinks, as

Malt Liquors, especially Porter. It is remarkable that persons, who 2 or 3 weeks before would be able to drink 2 or 3 bottles of Wine or Porter a day, now, cannot without Intoxication drink more than a Glass: So debilitated is the System that it even burns the mouth in drinking it. An ignorance of this fact, has caused Death in many who have used too active Stimuli in this State. A Gentleman convalescing from Typhus, was seized with a fainty fit at Dinner in consequence of taking a glass of Wine. A cordial diet should be used in this State. Begin with Chocolate, then meats boiled, as Veal, Chicken &c. proceed to Oysters, Wild fowls, beef steak and roasted meat, also . . . . and Salt meat in general. In this circumstance of diet, great care must be had to eating very frequently rather than too much at a time It was for prescribing a Whole fowl that for Hydrastes, when a Convalescent, that Alexander slew his Physician, whose he died in consequence of ~~it~~ Eating it. Many persons in this debilitated State, have been killed by eating too much, and many more have had relapses. Mr. Howard tells us of persons relapsing 40 days after a recovery from the Plague, by indulging their appetite. Mr Bruce goes further, and tells us that after having lived on vegetable food for a long time, while crossing the Desert of Arabian Nubia, that he fainted at the smell of Animal food,

When he arrived at Malpica. It is owing to the extreme debility of the System. Relapses are also frequently induced from excess in the enjoyment of the Venereal Appetite; also sudden arival of long absent Friends; a sudden piece of news has likewise produced relapse in Dyspheas.

Great care should be used in guarding against the expert employment of the Understanding. in this State. Relapses have occured from intricate business; and a case is recorded of a person dying suddenly, after having answered a letter upon an important piece of business.

3d. Change of place is requisite in guarding against relapses. The Patient should soon as possible be removed from the chamber in which he was cured: the bed Curtains, Furniture, empty Vials, Pill boxes, Fragments of Linnen rags, plasters &c. &c. all tend to excite a disagreeable association of Ideas in his mind, which are to be guarded against. — 4th Change of dress is also to be attended to; it has a singular efficacy in exhilerating the Spirits. A Gentleman in South Carolina could always obviate a fit of low Spirits by changing his clothes. 5th Gentle exercise should be used, as riding in a carriage. This should not be carried so far as to induce fatigue; the change of objects here are very pleasing: they afford fresh testimony of the renewed contracts for Life. — Warm Cloths, both body and Bed cloths at Night

In this circumstance great care is requisite. Huxhams tincture of bark, should now be given, in the dose of a table spoonful, three times a day with wine. This is of great utility in obviating debility. Attend also to the following cautions, 1st. Great care must be taken to prevent reinfection; of course the Patient must be removed from the Chamber in which he was sick. 2d. All Purging Medicines must be avoided as they tend to relapse. 3d. Great care must be taken to guard against cold Air; or in Warm weather Cool air. I have known many cases of relapse from a Patient sitting in a Stream of cool air of a Summer Evening.

I Shall now proceed to mention the remedies for each of the Symptoms which occur in this State. Wakefulness, may be obviated by a dose of Laudanum in the evening, or what is better, a moderate draught of Porter, and a piece of bread and cheese at supper. The sickness at stomach, and ~~drowsy~~ Vomiting of Greens an attony of Stomach, and is best removed by eating a Supper before bed time, or else by the Stimulus of a little food before the Patient rises in the Morning. 3d. Where there is a defect of appetite, it may be remedied by the Elixor Vitriol, Colombo root, or Bark in form of Huxhams Tincture.

In swellings of the limbs (Anasarcous) Rubbing upwards, and in the morning is the best method of promoting

absorption. In disorders or obstructions of the Viscera; bleed-letting should be used, where indicated by pain or the state of the pulse. If a yellow Skin accompany an obstruction of the Liver, a purge of Calomel and Rhubarb will effectually remove it. The Ulcers which we mentioned sometimes occur, are to be treated as those from other causes. In all cases where the faculties of the mind are affected, relief is of a very difficult nature. — Sir John Pringle. . . . . I have seldom been able to relieve them: but I cured one case in the course of 6 months where the Moral faculties were affected, by means of Cold bath. They generally terminate in Fatuity or Mania. Exercise is the best remedy that can be used, & the Cold bath.

With this Gentlemen we finish our account of the treatment of Fever; but before I dismiss the subject, I must caution you to beware of the ill effects arising from having your Patients ill attended by a bad Nurse. The Nurses are very apt to deceive the Physician, as to the quantity of medicine the Patient has used. If Spirituous Liquors are prescribed as the Medium of the Medicine, they sometimes get drunk & are unfit to wait on the Patients. They sometimes give the medicine at improper intervals, or in an improper vehicle. In cases therefore of extreme danger, you will do well to have the

Medicines administered under your own Eye. Since the above mode of treating Fever has been generally practiced, much Gentlemen has been deducted from the bills of Mortality. It was formerly calculated that of Patients ill of Fever, 10 of every 100 Died. Now not more than 1 in 100 Cases prove fatal. Let us go on then Gentlemen, the time may come when Death will be as uncommon an occurrence from Fever, as it now is from the Tooth ache.

Persons who have been long sick are frequently very fat. This I mentioned formerly as a disease, it depends on Debility. I had a patient, a Lady, who after being confined to her Chamber 6 weeks, weighed more when She came down Stairs than when She went up.

Chronic Diseases are removed by an attack of an acute one; thus the Plague has in many cases cured the Gout and eradicated it effectually. It was observed by Dr Hodges, that Barrenness was cured by the Plague in 1665. How can Fever act in producing these effects? Answer, Direct debility is induced, in consequence of which, Excitability is accumulated, and a broader surface exposed to the action of Stimuli. Take notice Gentlemen, of this explanation, the fact will afford us a Clue, by which we may develope many circumstances

circumstances in Diseases.

I proceed next to the Prognosis in Fever.- This I shall treat of before I speak of the different States of fever, as they all require some peculiar remedies, tho all are included under the 7 different Forms of Synochus, Synocha, Synochoid, Typhoid, Typhus, Gangrenous, and Malignant.

In treating of the Prognosis, I shall commence with Pain. Pain as I formerly observed, is not a disease, but merely a Symptom. It is not universal, and where it occurs, it gives us but little insight into the nature of the disease, as many of the most dangerous and violent diseases, progress & terminate without any pain; and in many diseases of no pleasure pain is violent, as in Toothache, so that pain is by no means proportionate to danger.- In many cases pain is a good sign, as in diseases of the Brain after Vertigo: Also Headache in Mania, is a good Symptom.

Preternatural Heat and Cold. These afford Indications in disease; they are diseases of themselves when unconnected with any other Symptom. When heat is accumulated in one part, it abstracts it from

others; thus a Caustic applied to the end of the finger will make the whole hand pale colored. Great heat and coldness alternating are signs of Malignaty. Great heat without fever, portends Death to be nigh at hand, and there are few recoveries after it. Cold wrists, and hands of the usual temperature, are also indications of approaching dissolution. Sir at the wrists the coldness of Death takes place; but cold breath shews the Lungs to be of the same temperature, and is a bad sign in disease; there are very few recoveries from it, tho it sometimes becomes warm before Death.

Frequent alternation from heat to cold, indicate Danger. Cold feet great Malignaty. Cold Stomach is very dangerous, it sometimes occurs at the Crisis of a Fever (Hunter)

Next of Prognosis from the Senses. Much is to be learned from attending to the Eyes in Fever; Red Eyes indicate Congestion in the Brain; Yellow eyes, a bilious diathesis. Muddy Eyes, great Malignaty. The eye half closed drawing (except in cases of Dysentery and Diarrhoea) during Sleep and in Children, indicates great danger. Coats of the Eye dry and glassy, great danger also. One Eye larger than the other, one Pupil more contracted than the other, winking or a defect of motion from Palsy of the muscles

which move the eye, all dangerous. A Fascination of the humors of the eye, sometimes occurs in dangerous cases. Involuntary motions of the Eye, passing from one object to another quickly, indicate affections of the Brain. Sudden appearance of Vigor or wildness of the Eye after Langour, involuntary tears or an utter incapacity of weeping, are bad Signs. A disposition to Shed tears in acute diseases, is always a favourable Sign. A Sudden look at a Physician the moment he enters the room, favourable, & shews the return of excitability.

Much may likewise be learned from the attention to the sense of Hearing. A Tinitus Auriem, from a quick convulsive motion of the muscles moving the bones of the Ear which sometimes occurs. . . . Deafness when it occurs in Typhus is favorable; it proceeds from an increased secretion of Earwax in the Meatus auditorium, which indicates Vigor increased in the Glands; When it occurs in Acute cases, it is unfavorable; but patients do sometimes get well. When it becomes very acute, shews a Crisis to be at hand, which ends either in Death or Health. Shews restoration and increase of Excitability.

Of the Skin. An insensibility of the Skin to Cold and to Blisters, is very Alarming; and —

dryness of the Skin in acute diseases, is not always unfavorable. A Soreness of the Skin is a bad Sign: it occurs very frequently in Yellow Fever before black Vomit.

A Burning of the Nose, and Extension of the Sense of Smelling, favourable, especially in Yellow Fever, they indicate a Crisis.

A dark Black Tongue, if it does not proceed from Liquorice, Tobacco, Steel, Bark Buxhams Tincture Red Wines, Currant Jelly &c. indicate much danger & a bilious inflamatory Diathesis. A White Tongue shews an inflamatory fever. A dry Tongue, if not from Sleeping with the mouth open, is alarming, shews a tendency in acute diseases, to Run into Typhus. The Edges and Tip of the Tongue, moist, favourable. The Black Tongue, indicates a Gangrenous disposition, and continues 4 or 5 days after a Crisis. But a worse indication than any of these in Malignant fever is, a perfectly Natural Tongue. This has deceived me many times in the Yellow fever of 1798, and in 1 or 2 cases in '99. Tremors, and an inability to protrude the Tongue (out from) of the mouth, is a bad Signs. A Moist Tongue, favourable. A Red, inflamed, dry, and Glassy Tongue, highly Dangerous. A Moisture

* This was the case with James Chandler, a man whom I attended, at No 2. South Second Street Phila.a Observed that his Penis was about three inches longer after Death—

R. C.

about the Gums and teeth, favourable - A dryness and Gnashing of the teeth, unfavorable. Hanging of the Lip and under Jaw, unfavorable. Yawning, and Sneezing favorable, indicate a return of Suspended Sensibility - A constant hawking & Spiting, called Screatus, favorable. A Chilly fit at the close of a Continued Chronic Fever, favorable, shews a tendency to Intermission.

Voice. Sharp voice, and Quick tone if not Natural, is alarming; as is also a Quick low tone of Voice, tho I have known Recoveries after both. A Drawling Voice.

. . . . . .

A Priapism sometimes proves a recovery, and also an unfavorable Crisis - A Case of Death is mentioned in Haller's Bibliotheca Medicina, in which the Penis was Erect two hours after Death* (Vid. Vol. 3d)

Countenance. A Malignant frown, bad - Hence the name of Malignant Fevers, from its frequent occurence in them. Dr Letsome Says it occurs in Hydrocephalus Internus, and I think I have observed it. A Sudden Resemblance to a persons Ancestors, very bad; it is owing to a retrocession of flesh from the bones of the Face, discovering a new set of features, never before observed. The Hyppocratic Countenance very dangerous: It consists in a Sharp nose, Hollow Eyes,

Temples Sunk, Lobes of the Ears Cold and contracted.—
Skin of the Forehead tense and dry, Colour of the face, tendency to a Laden Hue.

Lecture 42d

Prognosis Continued.

At our last Lecture, we treated of the Signs of life and Death or Prognosis in Diseases; with this Subject we shall proceed.— The extension of the Sense of Smelling is so great in some cases of Disease, as to be scarcely credible.— That of Hearing is equally Surprising. In my observations on these Signs, I distinguish between Fatal and dangerous. These words are not so expressive as the Kakon, Malum, of the Greeks and Latins, but they are the best our Language affords. To proceed, Many indications are afforded by Respiration. An alternate quick and low Respiration — Inspiration and Expiration, is a bad Symptom; also a moan and hollow sound in respiration. Cold Breath indicates Death at Hand. In Respiration, if the Nostrils are ~~Dilated~~ Dilated, bad. Phlegm rattling in the

Throat, very bad; shews that the Trachea has lost its Excitebility. Motions of the muscles of the Shoulders and Breast are bad Symtoms. But Death sometimes comes on without any of these Changes.

The Position of the Body opposes Prognosis. Lying on the side is favourable, on the back, less so. When the Legs are raised to support the body, bad. But worst of all when natwithstanding this, the Patient slips down in bed. These Changes are perceptable in Cases of Typhus. They came on in the order just mentioned in the Military Hospitels during the war. I had opportunities frequently of observing them. Patients would sometimes slide down in bed near the fire and burn their feet nearly to the bone without feeling it. This want of sensation is a very fatal Sign, very few recover after it. Fearnors, Starting, Subsultus Tendinum, are all unfavorable signs in Acute diseases & Fevers.

Much is to be learned from the State of the Mind. Good humor, good Temper & Resignation, favorable. Peevishness at the Termination of a disease favorable, shews the return of Sensibility and Irritebility. Silence is worse than talkativeness in Delirium. A return of old habits, both Mental, and of the body, indicate a return of good health.

(Instances) which should give you great Courage in Chronic Complaints. Long and deep Sleep at the commencement of a Fever, is unfavorable: At a Crisis, or a Critical day, it is favourable. — Return of an habitual Pain; or a Recurrence of a Chronic in an acute Disease, is favorable, as an habitual Headache pain of the back &c. Sleep and wakefulness quickly alternating, bad; a Patient will sometimes fall asleep while you are talking to him, and wake again as readily without Consciousness. Swallowing with and a noise in deglutition, unfavorable. Also one or two Swallows made at a time, bad. — Absence of Thirst in a Violent Fever, alarming; but violent thirst at the Termination of a Disease equally unfavorable. It shows the last retreat of Excitement to the Fauces and Stomach.

Vomiting at the Close of an acute Disease is unfavorable, for the same reason. A return of appetite for Artificial articles of diet, as Tea, Coffee, Tobacco &c. is favorable. Tea is less so than Coffee, but this is unpleasant in almost all acute diseases — except the Yellow Fever. The same observation applies to Tobacco.

Let us next attend to the Prognosis from

the State of the Secretions and Excretions.

A Suppression of the Secretion of Urine without pain, is very alarming: it occurs in Gout and Malignant Fever; shews an "engorgement" of the vessels of the Kidneys: dark high coloured Urine shews Inflammation: Pale Urine, indicates Spasm. Cloudy turbid Urine is favorable, also a copious Sediment. Frequent and involuntary discharge of Urine is a bad symtom. But the Urine is influenced by such a variety of Circumstances, as Drinks Medicines &c. that I seldome examine it, and never ask for it.

State of the Stools. White Stools indicate an abstraction of bile, in the first Stage of Fever is unfavorable: Green and black Stools, a morbid secretion of bile. The Stools are sometimes so acrid as to excoriate the Rectum; this is a bad Sign. Thin Stools indicate weak bowels. Scyballa, or irritation of the bowels . . . . . .

. . . . . Absence of Smell in the Stools is a dangerous Symtom: A return of Smell is favorable. Involuntary Stools are bad. A relaxation of the Sphincter Ani is very unfavorable. A return of power to retain Stools, favorable, especially if accompanied with Crepitus. A discharge of Wormes

favorable. A return of the Customs of one stool a day at the usual time favorable. (From an association of motions as in health) This is the most certain sign of returning health; indicates a tendency to re-establish the Equilibrium of Excitement and Excitability.

From the Stomach. A dark coloured discharge from the Stomach unfavorable.

Skin. Particular Sweats appearing on different parts of the body, unfavorable. Copious Sweats on a Critical Day, favorable. Moderate and Universal Sweats favorable; they have been Considered as favourable, but when too copious, they are a disease, and it is the business of Medicine to prevent them. A putrid taste and Cadaverous Smell of the Sweat, a fatal Symptom. Cold Sweats bad. When the Humoral Pathology was in vogue, much Confidence was placed in the Copious Sweats that occured on the Critical days; it was supposed the morbific matter was discharged by this means. A Sudden inflammation and discharge from Blisters, Ulcers, or Issues which have healed, is unfavorable; it occurs frequently in Typhus. Blisters applied on the 6th Day of the disease, which have healed, will discharge and inflame on the 15th or 16th. Abscesses were formerly supposed favorable, but they are Disease, & it is the duty of a

Physician to counteract them; they are least dangerous when they occur in the Arms, Kidneys and Nose.

After all that has been said of Prognosis, there is hardly one sign enumerated, but what sometimes deceives. — From this fact two inferences are obvious, 1st. Never to forsake your Patient under the most discouraging Symptoms. 2d. Never to predict the issue of the a Disease, as they sometimes die in the most favorable Symptoms, after all disease is subdued, of Debility; and some on the contrary recover in the most discouraging Symptoms. If you are forced to deliver a decided Prognosis, let it be that the Patient will Die; then if he recovers, they will suppose your Skill superior to your Judgement; and if he dies, you gain Credit from your Prognosis: but to be Serious, it is the height of Quackery to promise Success even in the most slight attacks of Disease. When I am called upon for my opinion, I commonly evade in this manner, "I have seen Patients much worse, recover, and I have seen Patients die who did not appear to be half so Sick." This commonly carries me through

We come next to Speak of the Signs of Death. And here I shall be very concise. I know of but one certain Sign of Death, and that is Putrefaction; Hence persons who die in a Paroxysm of a violent Disease, or Suddenly by Apo-

accidents, ought never to be speedily Interred but kept at least for two or three Days.

I Shall next make some observations on Critical Days. Thos were formerly supposed to be of the greatest importance in Medicine. They were first introduced by Hippocrates, and much reliance was placed on them. Some certainty ought have been obtained on this subject in the Days of Hyppocrates in Greece: The mode of life there; where every man was a Soldier; the Air of Greece, vigor of Constitution resulting from the mode of Life, which approached somewhat to the Savage State; and a thousand other Circumstances, with which we are acquainted, might favour the uniformity of Diseases in those times. An act of Intemperance under those Circumstances would produce a Simple fever only. But in the present State of Society when so many effeminate Customs have been introduced, render Certainty and Uniformity here impossible to be attained. Added to this, Hippocrates seldom disturbed Nature in her operations by Medicines, except such as tended to assist her: He was a Calm Looker on. Bleeding, Vomits, Purges, he seldom exhibited. I donot deny the importance of Critical Days altogether; But such as occur in Great Britain, ought not to be relied in the United States. Ought they to be rejected from

the United States? Not altogether, but little attention ought to be paid to them. In London and Edinburgh all Fevers assume the form of Typhus Mitior. In cases of this Disease Critical Days are seldom perceivable; may more, the days of the attack are seldom known: they come on and go off gradually. But in the United States, there occurs many forms of Fever, depending on natural causes, in which nature exerts more power, and perhaps, the Critical days may be more observable. — Dr. Cullen adopts the opinion of Sennac, that the only Original Type of Fever, is the Intermittent State, and the original forms of this are the Tertian and Quartans. This I believe: All Fevers, we accordingly find partake more or less of this form; hence they generally terminate on the 3d. 5th. 7th. 9th. 11th. 14th. 17th. 20th. and so on. Dr Cullen very justly says, the Fever is not completely formed till the 11th Day; it then assumes the Tertian Type: but if they terminate before then, it is commonly, but not always, on an odd day; sometimes on the 20th. 21st. &c. In many cases little difference is observable. Crises are frequently induced by Depleting remedies; and many die of the first Paroxysm. Dr Sydenham thot. each Fever that should last Naturally for 336 hours, of course, the Crisis should occur on the 14th day; that Quartans

might last 6 Months, and Continued Fevers had a Crisis every 11th Day: But this is entirely hypothetical, and founded on Hyppocrates's notion of Concoction.

Dr Balfour, rejects entirely the Critical Days of Hyppocrates, but substitutes in their stead, Critical Periods, which he ascribes to the influence of the Moon. The Character Respectability of the Dr entitles his Opinion to consideration. He grounds it on the influence of the Moon as observed 1st In Tides, 2d upon Vegetation; 3d on the State of the Weather; 4th on dead matter which it disposes to Putrefaction; 5th From its influence in certain diseases, as Mania, & Worm cases, and also from the exertion of the bile which is increased at the Full of the Moon. The Dr observes that during 14 years experience, he observed most of his patients to be attacked (in Bengal) either 3 days before or 3 days after the Full or change of the Moon: And more were taken sick on the 6 days, 3 preceding & 3 after the Full of the Moon, than in any other 6 days of the Month. Dr Lind observed the same in 1762 in the West Indies; He ascribes it to the Filth deposited by the high Tides on the Sea Shore. Dr Balfour proceeds to take notice that Relapses are more frequent and require more copious evacuations at this period than at any

another. The Dr applies his principles extensively, uses the Bark in greater quantity at this time: he says relapses may be guarded against by care at this period and credit gained from predictions; the 3 days preceding worse diseases attack than in the latter 3 of the 6. The Dr further informs us of his having applied in Inoculations for the Small Pox. I think I observed it in the yellow fever of 1797. Dr Pinckard informed me that he observed the same thing in South America, up the River Demarara. The Planters there are so well acquainted with it that they refuse invitations on any of these days Dr Balfour is not the original Author of this Opinion: On reading Diemerbroeck, I find he advanced the opinion as long as 100 years ago. As he is an obsolete Author, — probably Balfour has not seen or heard of his observations Dr Moseley has observed it in Jamaica. Dr Gillespie in his Surgical Remarks says Sore lips are influenced by the full and change of the Moon. These observations prove that there is some truth in the opinion however obscured by error. Error is a counterfeit of truth; it serves to prove the existence of the original Coin. I commit the Subject for your Consideration. —

Lecture 43d

Hitherto we have said nothing of the Particular States of Fever. This I shall commence with

The Hectic. The Hectic is an irregular intermittent Fever; it differs, however from common Intermittents. it may be distinguished from it, 1st. by its Paroxysms, these are seldom alike more than 3 or 4 times; they change variously after the 3d. Paroxysm. 2d. It differs in the sweat which come on frequently without the Fever intermitting. 3d. The sweats afford little or no relief in the Hectic State of Fever. 4th. The Fever continues moreover after the sweats, and sometimes there is chills in the midst of Fever. 5th. The fits sometimes disappear for 10 or 12 days together it sometimes comes on after a chill and sometimes after a sweat. — Drowsiness . . . . . 6th. The State of the Urine and Faeces are different in the Paroxysms of Hectic. The Urine is clear, and turbid in the Intermissions . . . . . In Intermittents the contrary of this obtains . . . . . .

Dr Winter shewed a Subject with a Cancerous Ulceration and Ulcerated Lungs, in 1809.

7th. Great pain or else Rheumatism. . . . Ulcers. 7th
8th. Swellings without discoloration of the Skin occurs in Hectic in the Limbs, Neck and body; then disappear of their own accord.

Again it differs from there in being confined in by one chill; on the contrary it is sometimes several months making it approach by slow progressions, - also by continuance which attends it. The Pulse in Hectic is seldom full, but always quick and frequent. I saw a case however in the Hospital, in 1791, unattended by a quick Pulse, and another since that time, both of which proved fatal. — Lastly Hectic Patients are able not only to sit up in bed, but go about and transact business as if in good health. The Hectic Fever is produced by obstructions internal and external, as Schirri of the Breast, Ovaria, Uterus. — Also of the Gall bladder, and Stomach. Hectic Fever also occurs from Fluor Albus, Poisons, Hemorrhagia. — Ulcers in the Lungs and other parts especially the joints; that kind which Dr Cullen calls Arthr. . . . which probably is a consequence of Rheumatism or Scrophula, or from Abscesses. But Hectic Fever sometimes comes on without any of these causes. — What are the Remedies for this State of Fever? —

Nitre in small doses —

Hitherto no Certain Cure for Fevers has been discovered. Bark, Steel, the Cold Bath, and other Tonics have been used without Success. A Milk diet has been used with advantage, but this most commonly fails. But more powerful remedies have been exhibited: Muriated Lime, without Success: Arsenic, with no advantage. The exercise of driving makes an impression on this Disease. I have been induced to compare it to Hercules's Shirt, which could not be pulled off by any force, but must be shaken off; in like manner, the exercise of Riding on horseback appears to shake off this State of Fever, and nothing without it has this power: it is true it fails in many cases, but this is owing principally to its being used in an improper State of the System. The State of the Pulse must be strictly attended to: Whenever it arises to Synochoid, Synocha, or even to Synocula, bloodletting is indicated. After this Action is reduced, Riding on Horse-back, is a most excellent remedy. The Pulse in Fevers is generally so low as not to require depletion, as Typhus or Typhoid; but it sometimes rises to Synocha or Synochoid. The Bark should always be tried in those Cases, perhaps its failure may be owing in many cases, to its becoming Inert from habit: In such cases it should be left off for a while, and then it may be recommenced, or else

ders alternated by other tonics. The Bark seldom does good where the breast is affected.

The Febricula State of Fever.

In this State of fever, the morbid action is so feeble, often times, as scarcely to be perceptible. It is called in the Southern States, the Inward fever. The pulse is very little quickened by it, for the most part Typhus. Patients are not confined by it. It has sometimes an exacerbation in the evening; and in some cases it is accompanied with Diarrhoea.

Mr. Volney informed me that during his travels thro' the Southern and Middle States, he scarcely met a person who was not under the influence of this Febricula, tho' they did not complain much of it. Its cure is somewhat difficult: it has baffled the use of Bark and wine: the action is too great for these remedies: Moderate bleeding; a vomit, or what is more safe, a purge, (where no Diarrhoea prevails) is the best practice in this disease. It may be considered as a State of predisposition to Intermittents. A powerful exciting cause as a ride on horseback, often changes it into an Intermittent, as Dr Claypoole often observed in North Carolina. It is produced, I believe by Marsh Miasmata, hence occurs in the Fall, when the Atmosphere is

atmosphere is impregnated with it.

The next State of Fever is the

Intermittent. The Intermittent State of Fever was formerly an incurable disease, however Simple it may now appear. James the first of Great Britain died of it. And Oliver Cromwells death was from this disease. In some parts of Holland this disease is fatal, owing to the prejudices entertained against the Bark; also in several other European countries. When it is cured without this remedy, obstructions commonly are the consequence; of the Gallbladder, appearing in Jaundice, or of the Absorbents, appearing in Dropsical affections.

The CURE of Intermittents, naturally devides itself into two parts. 1st. To moderate or Subdue the Paroxysm 2d. To prevent its recurrence by medicines exhibited during the intermission, when it appears in its common form.

We may know when we have an Intermittent to deal with, 1st. by its occuring generally in the last Summer and Autumnal Months, 2d. We may reasonably expect an intermission from the long continuance of the Paroxysms; 3d. a discharge of Bile appears in reason to expect an intermission of Fever. 4th. Its attacking Patients mostly in the morning.

I. To abate the Paroxysms is of consequence, since they often terminate in Death; and even if there is not great danger, 1st. Bleeding should be used to prevent pain and consequent obstructions. Bleeding is indicated by the Pulse, which is full and tense; it is also proper, to assist the operation of the Bark, which it renders more effectual; it is especially indicated where there is a Malignant State of the air prevalent, and in all cases of Vernal Intermittents. It is most proper to commence the cure immediately by venesection, and prepare for the Early use of the Barks; and not wait as was formerly the practice till two or three fits had been present: this was done to allow the concoction of morbific matter to take place before its expulsion.

The Yellow Fever appeared in 1794 in the Form of a Tertian; and every year since it has put on more or less that Form. Here was only a more violent case of the same disease, and bloodletting was necessary for its cure.

2dly Purges. These may be given in the Paroxysm with or without bleeding; bleeding after their operation, but the State of the pulse must regulate this. Bleeding should be combined with them if a Malignant State of the air prevails.

3dly Emetics, are proper when nausea attends without vomiting, occasioned by Bile; they are also proper

in the forming State of an Intermittent, which they stran-
=gle if exhibited before completely formed. But emetics
must be avoided wherever the disease assumes a malig
=nant Type, or is of much violent action; where action is
more feeble they are of use. Opium is useful in Intermit
=tents; it lessens pain, and checks vomiting; but it must
only be used after bloodletting. I can conceive of a Case
of Intermitting Fever, & originally so mild as that Opium
would cure it by exciting a new action, or, a Stronger one,
but in general it is to be avoided if quick action attends.
Dr Ballo, in his account of the diseases of St Lucia in the
W. Indies, says he used Laudanum with advantage in the Par
=oxysm of Intermittents; it must have been when the
Morbid action was as low as Typhus. Death has been
induced by it in Paroxysms of violent action. Further,
diluting Drinks, as Weak Punch, Lemonade, Balm tea
&c. are to be used.

II. The Remedies which prevent the recurrance of
the Paroxysms, are either Palliative or Radical.

The Palliative, prevent one fit or at most 2 or 3,
but the disease recurs after that.

1st Opium is of use in preventing an attack of
it; the Form of Laudanum is the best. 30 or 40 drops
given before the time when the Paroxysm is expected

will frequently obviate it; and then 5 or 10 drops every hour for 3 or 4 hours before the attack is expected, it strangles it as it were, creating a stronger action, but then the disease returns again: It should not be given in malignant — intermitting fever.

2dly Certain aromatic substances, as Nutmeg, — pepper, vinegar &c. used before the attack is expected are useful.

3dly Tonics. These are composed of bitter and astringent, combined as Centaury, Camomile flower tea, Willow bark tea, tea made of the bark of the root Poplar, of Dogwood bark, also Gentian, Oak Galls & Allum. Added to these the Juice of Spiders. There is something venomous in these insects; but Dr Rotherford has introduced it with advantage as a remedy for the severer Intermittents: in small quantities they are forceful.

5thly Sweating, before the fire or by means of hot drinks. This was much used among the Country people of these States about 40 years ago, when the prejudices against the Bark were so strong. The exercise of riding on horseback, prevents very often the accession of a paroxysm.

Terror has sometimes cured it. (Case in which from Chimney on fire cured it) Electricity has cured it. Violent exercise as Dancing has been known to cure it. The supposed bite of the Tarentula has cured it (by terror excited) — This has been supposed in Italy, to be the remote cause of

Intermittents as this animal appears just at the time when Intermittent fevers prevail.

The Cold bath has cured it. The Tonique applied to the thigh has cured it. All these remedies are but palliatives they are temporary, postponing the Paroxysms, relieving 2 or 3 or even 4 fits, but they return again; they were all known and much used before the Bark became known; this is the first Remedy under the 2d head, such as cure Radically. -

The Bark is composed of a bitter and astringent quality. Dr Brown is the first man who opposed the use of the Bark: he, probably never saw a Simple Intermittent in his life. To be effectual, it should be exhibited when the debility is greatest, viz. just before the accession of a fit, and in large doses from ʒi to ʒfs. In this way we do more good than by giving pounds of it in the intermediate days; this method is prescribed by Dr..... of Lisbon, Cullen, & Crawford; but opposed by Dr Home, the only man who has made any opposition to it (See Homes Medical Tracts). The best vehicle I know to exhibit the bark in, is Porter; this affects the Tonic effects of it, and deprives it of all bitter taste; when the use of this is inconvenient, a little Wine or Milk may be substituted. When from habit, the Bark has lost its efficacy, and the Pulse continues Languid, other Stimuli may be added, as in Huxhams Tincture, ʒfs of Bark to ʒi of Huxhams Tincture; & 20 drops of Laudanum

may be used in this case with advantage, or some other Stimulus may be substituted for a while and the Bark used afterwards. The Bark should be used in greater quantity about the full or change of the Moon. The Red Bark is best, tho' the several other Species of Yellow, Pale &c. may be used with advantage. Sometimes, especially in Children, we are unable to obtain the Bark by the Stomach; in this case it has been common to Quilt it in a Waistcoat, but a much better mode is by Glyster; but when after the copious use of the Bark, the Intermittent remains, what is to be done? Other Stimuli as I before observed must be substituted, as Cloves, Mace, Wine, Hax. Tinct. combined with it. In many of these obstinate cases Arsenic, and Zinc may be used with advantage. This is an universal Stimulus, and a very powerful one. If all these fail, Mercury must be had recourse to, so as to produce Salivation: this Remedy was introduced into practice by Dr J. Bond in the Pennsylvania Hospital. Wine may also be used during the intermissions; a change of Air must not be overlooked in this complaint, it is of great consequence to be attended to; and has cured where every other remedy has failed.

Are Vomits and Purges proper in Intermittents? They certainly are. Vomits have been prefered from the bile in the Stomach, but I prefer Purges of —

Calomel and Jalap, as not only equally useful, but more pleasant to our Patients: These remedies, or one of them, should be used before the Bark; but in those cases where Morbid excitement is weak, about Typhus, the Bark may be used without either of them, especially if Diarrhoea attends. If all these fail, there is presumption that Inflamatory Diathesis prevails, which is to be subdued by bloodletting this I would use in every Paroxysm. Bloodletting is more necessary especially in all cases protracted to Cold weather. Dr Ramsey used to bleed in Intermittents protracted to cakes about Christmas. Sometimes the Intermittent puts on a different appearance; sometimes it appears in form of a Dysentery. Senac then calls them "Febres Intermittentes Sub forma".

It requires the same Remedies as in common cases, — Where violent Bloodletting is to be used, but it frequently yields to the Bark. —

2d In form of a Coma and Apoplexy. I have seen in this City, Apoplexy put on the Tertian Type: it yields to Bloodletting and Blisters. These must always be used if Coma occurs, Bark afterwards. Sometimes it appears in form of Convulsion; this happens most frequently in children, either a Quotidian or Tertian. Laudanum must here be used. Sometimes it appears in form of Cholera —

Morbus; this also yields to Laudanum. Senac makes this observation in his Treatise "De febrium intermittentium natura reconditâ", if it refuses to yield to Laudanum and puts on a Malignant Type, Depletion must be had recourse to. Sometimes it comes on in form of a Periodical — Headache, or pain of any part of the body. Periodical Headache was Epidemic last Fall in this City, and is hardly yet worn off, occuring every day, or every other day. Dr Cullen took notice of this; he says in a part of Scotland subject to Intermittents, these did not appear in one season as was customary, but instead of them a Periodical Intermitting Headache occured, which he says was the same diseases in a different form, and as it yielded to bark and blisters, tho headache is the usual Symptom of Intermittents, yet they often appear in form of pains in the back, breast, Eyes &c. then yield to the usual remedies for Intermittents. Sometimes it appears in form of Mania, occuring in form of Tertian, and in other cases Mania appears during the Intermissions, or, alternates with it.

Dr Irving describes a Fever which appeared on the Spanish Main in 1780 in which Mania alternated with the Intermittent. And I saw a case of the kind in the Pensylvania Hospital in 1794.

Sydenham takes notice of it. The remedies here depened on the State of the System.

In some cases it appears in form of an efflorescence on the Skin; and Dr Claypoole informed me of a case where it alternated with Gonorhoea benigna.

Intermittents when they become Epidemic, arise from Marsh Miasmata, tho' they are in some cases contagious, but here it is only in the ejections as the sweat; by these it may be communicated.

It sometimes appears in form of Contagious Dysentery; for an account of which Refer to Dr Clark. Cases of this kind have occured in Virginia.

Dr Rush in his Lecture Jan. 9th 1802 omited all that relates to the distinctness of the Remote cause of Pestis and Yellow Fever; he now considers them the same, both diseases arising from Marsh Exhalations.

The following circumstances appear to produce the diversity which obtains between Plague & Yellow Fever. Climate, Diet, Manners, Religion & Government. I am induced to adopt this opinion from reading late writings on the Subject. Dr Caldwells publication, the travels of Martini and others.

1st The Disease does not exist where there Exists no Putrefaction. In Constantinople it is very prevalent, and this City I am informed by a very intelligent Traveller, is extremely filthy.

2d The Plague is not Specifically Contagious; this is no new opinion, Sundry Swiss and Russians long ago made this assertion, and a French writer since, has supported this opinion. It is propagated only from exhalations confined and putrifying hence another source of it is Large Cities.

3d The Eastern Plague never was, and I will venture to say, never will be exported from one Country to another like the Yellow Fever: it is destroyed as soon

1811

Lecture 44th

We next proceed to the Malignant State of Fever: this appears in the Plague, Yellow Fever, Disease from an over dose of Opium, and the Hydrophobia: tho many other diseases ~~just~~ are frequently put on Malignant Symptoms, as the Small Pox & Pleurisy, but these are less uniformly Malignant than those just mentioned.

The Plague. Of this I can say nothing of my own experience and observation, having never seen it. What I shall advance on this Subject, is from books, and the relation of Travellers who have seen it. This will be useful as it will extend your Ideas of Fever.

Malignity is more universal in Plague, than in any other form of Fever.

Plague is the offspring of Human miasmata. Take notice, I say Human Miasmata, to distinguish it from the Marsh miasmata; and also from Contagion of Rabid Animals. Pestilential diseases,

as we remove from the foul, polluted air where it was generated
From the facility with which the Yellow Fever was supposed
to be imported, in infected goods, and the influence of
prejudice on the minds of the advocates for this opinion
Find no difficulty in rejecting the account we receive of
the importation of Eastern Plague by the Natives and
others. Chardin very gravely relates a case where it
was communicated by a Knife Case; another by the
String of a door latch &c. There is and more truth in
these assertions, than in those of the Citizens of Phil-
adelphia, who import Yellow Fever in the Staves of
Molasses Hogsheads, Rum barrels, Bales of Goods &c.

do not always proceed from this Source; but the Pestis Vera does. It appears from this source in Constantinople, Grand Cairo, Smyrna. But a disease prevails in other of the Eastern parts of the World, on the Bank of the Nile, at Bapora &c. which proceeds like our Yellow Fever from Marsh or Vegetable Miasmata. Many facts concur to prove that the Plague proceeds from Human effluvia. It commences in Constantinople always amongst the poorer Class of people, who live in narrow Streets & crowded filthy houses. It is merely a higher grade of Hospital, Jail or Ship Fever. Mr. Webster has called this the Inguinal Plague to distinguish it from the Bilious Plague, or Yellow Malignant Fever. But here we see the impropriety of naming a disease from any one Symptom; as Bubo very often occurs in yellow Fever, and Bile does not occur in every case of the latter.
2d. The Plague is originally a contagious disease; but its Contagious influence is limited to the distance of 6, 8 or 10 feet, tho' its Contagion is not Universal. 3d. The Contagion of Plague adheres to Wool, Silk, Wood, Fur and a variety of Substances. Dogs and Cats are said to be Vehicles of it, & it is said (I give it on the authority of one Author only) that 40,000 dogs & 80,000 Cats were killed in the City of London in the Plague of 1664-5, to prevent their being

vehicles of the disease; how true this is I do not know but, it can adhere to Wood &c. as certainly as the Jail Fever.
4th. It may be communicated not only by contact with fingers and other parts of the body, but also by the breath, and probably it is commonly received by the Lungs. Dr Hodges who lived in London in the Plague of 1664, had an Issue on his Leg which pained him whenever he came into an atmosphere infected by the Contagious Epidemic. 5th. It requires the Inflammatory atmosphere for it to become Epidemic. It has been carried from Smyrna to Constantinople, without becoming Epidemic there, for want of the Co-operation of this Inflammatory state of the air. This State of the air exerts an influence even on Small Pox, which it renders more Malignant. 6th. Its prevalence is much influenced by the state of the weather; Cold weather at first increases it, but at length destroys it: Hot weather exists its progress, & peculiarly if attended by moisture: Moisture favours it, but Liquidity destroys it, hence the Fact it prevails in Constantinople in Summer, which is a moist season there, and in Egypt it prevails in the winters, which are moist; this was observed by Mr Volney;- He tells us farther, that the water carriers at Grand Cairo escape the Plague, by their being always wet. Sir Jack, Mr. Webster says,

is worth an Empire. The water Carriers, and those who lived on Westminster Bridge during the Plague in London in ~~1729 & 65~~ 166465, escaped this disease with the exception of 2 solatory instances. In the same manner be fixed ~~th~~ that the ablution of the air by a shower of rain, checks its progress. 7th The Plague may be taken 2, or 3, or even 12 times, according to some writers. Here it differs from Small Pox, Measles, and other Specific Contagions. 8th The Contagious Miasmata will frequently adhere to a person without affecting him, and yet be propagated by him to other Persons. Sometimes this miasmata acts suddenly, producing Sudden Death; but more commonly more slowly, like the Yellow Fever. Great difference is observed in the time of its termination, frequently not for 14 Days, tho seldom longer than this. Like the Yellow Fever, it is always of Domestic Origin. It affects Dogs — Cats & Swine.

Many methods have been used to prevent the — Plague, such as, 1st. washing the hands and face in the morning with Vinegar and eating Garlic and drink. — This remedy was first taken notice of by Diembroek, & seconded by Ambrose Pare. 2d. Spices. To this Dr Hodges ascribes his escape during the Plague of 1664-5 in London. Ambroise Pare asserts that the Plague was checked

in a City in Italy by the Putrefaction of the dogs & Cats which were killed to prevent its Spreading: this might have acted by the Strong Smell being a stronger Stimulus than the Remote Cause of the Plague.

Tobacco has been much used to prevent attacks of the Plague. Diemerbroeck suspicioned it to possess great virtues in this respect; but Mr. Howard, after making many enquiries into the Subject in Turkey, declares that a case of Plague was never prevented by Tobacco. Earth Quakes have been known to prevent it in Grand Cairo. The Eruptions of a Volcano cured the Plague in one Instance. Fixed Air has been said to destroy the Contagious Miasmata by Neutralizing it. At Morell in France, it is Said the Plague was cured by the fixed air, disengaged by the Fermentation of the Grapes during the Vintage.

The Plague, like the Yellow Fever, appears in every form of Disease. Sometimes it terminates fatally in a few days, and in Some cases runs on to Typhus Mitior, lasting 30 or 40 days (This the Typhus gravior of Cullen). When it has prevailed a considerable time, it is frequently chased away by the Small pox; but this is only in the decline of it.

We come next to treat of the

Cure of Plague. As it is a Fever of the most violent Morbid action, the Action must be taken down,

1st. By copious Bloodletting: This praxis recommended by Sydenham: For an account of its efficacy, I refer to my 4th. Vol. of Med. Eng. & Obs. - Diembroek bled copiously in the Plague in both Armies, and 2 or 3 times a day. To be effectual it must be used to great extent, further than in the Yellow Fever, when the Diathesis is. But there do occur cases of Plague in which the loss of blood would be improper, and has been followed by Death. These Cases happen where from the violent operation of the remote cause, the System is prostrated below the point of reaction. But we are not from these to relinquish the practice any more than we would relinquish the use of Tartar Emetic, because cases occur in which the Stomach has been in such an excitable State, as that Death has resulted from the exhibition of the Remedy. Here small and repeated bleedings, after the manner of Riverius are to be used.

A Tree which has been long bent to the ground, and grown a considerable time in that position, cannot be lifted Speedily without breaking; but it may be raised gradually to its former position: In the same manner is the System in this State. The depletion by Vene Section must be gradual. If the fears of the Patient, or any other cause renders Bleeding impracticable, the Cure must be attempted,

2d. by Sweating Remedies. Dr Sydenham used Sweating, where the use of the Lancet was prohibited. He did

not use Stimulating remedies for this purpose, but warm drinks, and a great weight of bed clothes. Frictions and hot oils are now in use in the Eastern Countries in this Disease. In Yellow Fever the same observation holds good: Where Bleeding cannot be used sufficient Sweat our Patients.

3dly. Purging. This was also used by Diemberock. He once observed that a person who used Tobacco, swallowing some of it, it purged him, & relieved him of his Disease; he prescribed Purges in consequence of it, and with advantage.

4thly. Vomits have been used with advantage.

5thly. Salivation, may be used with advantage, Where the above remedies fail, do not succeed, it should be attempted. We must regret that in the more violent cases of Plague, this remedy would be too slow to overtake the rapid tendency of the Disease to Death. It is a great desideratum in our Materia Medica to find a preparation of mercury that will produce a Salivation in 24 hours. I can readily conceive that in those cases where the Morbid excitement is Suffocated, where no pain exists, the action of mercury would be much facilitated, and its use would be advantageous.

Another Class of Medicines useful in that disease, is that which acts by abstracting Stimulus of heat, as 1st. Cold air. 2d. Exposure to cold Rains.

Dr. Savary & Dr Daignon have mentioned cases of poor people who have not houses to lie in, being cured of the Plague by being exposed to a Shower of Rain; and a man who, in the Delirium of a Fever in this Disease, jumped in to the Thames was cured of his Fever, & soon recovered in consequence of swimming across the River. The cold water acted by taking down excitement; and the exercise of swimming reduced the excitability. I have only to add here that this Disease like the Yellow Fever, is always of a Domestic Origine. Mr. Webster has proven this almost to a Demonstration, in the Plague in London in 16640 5 and in Marseilles in 1720. Many facts concerning the origin or origin of the Plague in both these Cities, establish the point beyond controversy.

I have remarked one fact in the History of all Pestilential Epidemics, that those Physicians are always the most popular who deny longest the existence of the Disease, and who contend, after its existence has been proven, that it has been imported. And the same fact obtains in the Yellow Fever, in this, and other Cities.

It has been asked, Why is the Plague less prevalent now in London and other European Cities, than it was an hundred years ago? Several circumstances concur to produce this Change. From the highly cultivated State

of the Country, and consequent diminution in the Sources of Exhalation. 2d. From large Cities being better supplied with water now than formerly, as in London from the Thames &c. 3d. From the Streets of Cities being built more commodiously for ventilation, by their being wider. 4th. From the increased quantity of Vegetable aliment now used. 5th. From the increase of Agriculture which serves to drain out the stagnating water from low places &c. &c.

In the Eastern Countries it continues for the following reasons,- First, from the Dirtiness & Filth in the Inhabitants of Cities. 2d. The uncultivated State of the Country continues to afford numerous Sources of Exhalations. 3d. From the Scanty Quantity & bad Quality of the Aliment of the Inhabitants of the Eastern World. 4th. The disposition of this disease is inseparable from the State of Political Slavery, in which the Egyptians & Eastern Nations now are - 5th. From the construction of their Cities, which have the Streets so very narrow, & from the immense number of persons crouded together in the Houses - Dr Savary calculates that 200 persons live in Grand Cairo in a Space which, in Paris contains but 30 Souls. In Paris the population is greater than here (Philadelphia) so that a Space in this City containing 30, would

* Or rather from huts which are very inconvenient & have no yards.

in Paris contain 200 perhaps*. 6th From the Religion or Doctrine of Predestination being still kept up among them. This prevents them from avoiding the remote Cause of the Disease.

I mentioned in our last Lecture that Headache is commonly an Evanescent Symptom of the Intermittent fever - The Yellow Fever is frequently cured as it is said, but really disappears in Prickly heat, according to Dr Hillary in Barbadoes. The Plague appears to have an Evanescent Symptom, a Diarrhoea. The Yellow Fever often has its Evanescent Symptom in Influenza, which prevails as this disease goes off. Ambrose Pare says Sneezing cured the Plague in Paris.

II. Disease from Opium in too Large quantity

This is a Malignant State of Fever. Its Symptoms resemble very nearly those induced by Yellow Fever. For an account of the similarity between this Disease and Yellow Fever, which appears in every circumstance relating to the latter, Yellow Skin, Inflamed Stomach &c. I refer to a paper on the Subject by Mr. Miller in the Medical Repository of N. York. The Remedies for the Cure of it are 1st. An Emetic, provided the Opium has not been in the Stomach a sufficient time to operate. A dose of Tartar Emetic will probably cause it to empty its contents; but if it has been in the

Stomach a quarter or half an hour, the Emetic will seldom operate. Diluting Drinks & Acids have been recommended, the former to dilute the Opium, the latter to obtained by mixing with it; but in most cases the process of Deglutition is — impracticable, and 2dly Bloodletting must be used to consid=erable extent; it assists the operation of an Emetic, if one has been given. I have seen the Disease cured by this rem=edy in 3 Cases. After Depletion, Cordials & Wine, with Ether are to be Administered. This fact is of great conse=quence it extends our Ideas of the Amity of Disease. After Blood =letting the Opium should be discharged by an Emetic or Purge. The Disease from the bite of a Viper, is the same as from the Miasmata of Yellow Fever, & Opium; the Cure is the Same. It is a disease of most violent action, terminating fatally in 24 hours in many cases. Perhaps Ablution of the part by Colosphony, in addition to the other treat=ment, may be useful.

For any account of Hydrophobic State of Fever, I refer to any 5th Vol. of Med. Enq & Observ. For an account of its Symtoms and History, I refer to Authors.

Lecture 45th

Dr Rush read from his 5th Vol. that part which treats of Hydrophobia. The following appears to be an additional to it.

(1804 Permit me Gentlemen to add one to the remedies there proposed, Tracheotomy. Death I conceive, takes place in Hydrophobia, from Suffocation in consequence of Spasm of the Glottis. Tracheotomy therefore by removing the Proximate cause of Death, would enable us to apply our remedies for the cure of the Disease.

Dr Physic is the first man who had the ingenuity to invent, and the Boldness to propose this remedy; for his Arguments and excellent observations in Support of it I refer to the Medical Repository of New York.)

I have only to add to this account of Hydrophobia, that a great analogy exists between the Action of the Poison of Rabid Animals, and all the Poisons of great force. They induce so violent morbid action in the

System, that it appears in form of Suppressed Excitement. The System is prostrated below the point of reaction. It certainly is a true Malignant State of Fever, or much Yellow Fever or Plague from Miasmata, and I find it cured by the same mode of treatment.

Poisons may be considered one of the Remote Causes of Malignant Fevers. Dr And. . . . a native of Pennsylvania who Spent a considerable time in Grand Cairo, says in an account of his travels thro Egypt, that the Egyptians allow the most poisonous Animals to bite them without experiencing any inconvenience from it, whereas the same animals destroy the life of Cats, Dogs, and other Domestic Animals. He says they were enabled to do this by making use of a particular Medicine or Diet, which preserved them and whose good effects lasted for months, & even years. This fact would appear incredible if it did not receive support from a similar one which we observe in the Rine Rot Matter; this Shields the System for Life from the contagion of the Small Pox.

The next Malignant form of Fever is the

Yellow Fever.

For a general account of my principles with respect to this State of fever, I refer to my publications on the Subject (vid. V. 3d & 4th) but I shall here give an account of the disease as it prevailed in the year 1798. In

this you will find it differs from that of '93 & '97. The Yellow Fever of '97, was succeeded by diseases of Inflamitory action; there prevailed in Novemb.r & Decemb.r. Cold weather began in the Middle of Novem.r and continued till the 5th. of Decemb.r when the River was closed. On the 14th & 15th of this month there was a Thaw which opened the Delaware. The Scarlatina & Bilious Pleuracy, now made their appearance.

In Jan.y '98. Diseases appeared to have a greater determination to the head. 4 Cases of Hydrocephales occured in my practice all of which yielded to Bleeding & Mercury. It occured in a Daughter of Mr. B. . . Lewis, & Capt. Andrew Elliott, in Mr. John Lewis, & in D. D. Muff. Catarrhs were very prevalent especially amongst Children in Feb., the weather continued so severe, that the Delaware was not opend till the latter end of Febr.y. In March Catarrhs and Bilious Fevers prevailed. On the 7th. of April I had a consultation with Dr. Physic on a genuine Case of Yellow Fever. The Patient was Mr. Pollock from Georgia. He Died. I did not see him till the 3d. day of the Disease of which he Died. Soon after this I had also another consultation with Dr. Physic on Mrs. . . . . of Kensington, who Died with black vomit the evening after I saw her. This I saw on the 3d. Day. There was a Snow storm on the 16th. of April which destroyed the young buds which had just put forth. On the 1st. Day of May the Thermometer

Stood at 84° this month was dry. On the 6th of June Dr Cooper lost a patient of the Yellow Fever, at the Corner of 12th and Walnut Streets. On the 2d July Dr Wister & Dr Hodges attended Mack Miller ill with the Yellow Fever; this was supposed to be traced to a bed that was infected; but this was not the case as was ascertained. Many other cases of the Disease now occured in parts remote from Water Street. Between the 2d & 20th of the month, a dozen cases occured remote from Water Street, one at the upper end of town at Shar- between 2d & Front Sts. On the 19th of July a hail Storm occured in the State of Delaware; the air in the City was so cool as to render winter Clothes agreeable. On the 21st the Ship Debora arived from the West Indies, in which it was said the Yellow Fever was imported. Several Cases occured from the foul air Emitted from the hold of this Ship, in common with what was derived from the Stagnating water, the common Sewers, Gutters, Docks, &c. The fact strongly in proof of this is, that the common Sewers are situate in Walnut between 4th & 5 Streets, and in the neighbourhood of them 53 cases occured; 33 of which were attended by Dr Griffiths. In the Month of August the Disease General. I shall mention a few of the Symptoms peculiar to this year, as they occured in the Bloodvessels, Tongue, Eyes, Nervous System &c. &c.

1st The Pulse, was preternaturely slow, much less active than in '97. Such as occurs in the first Stage of Jail Fever. There was Hemorrhage from the Lungs, Stomach, Bowels, & Gums. When this occured within the 4 or 5 first days of the Disease, it generally terminated favorably. The Stomach and Bowels were much affected. Vomiting attended in many cases from the beginning, sometimes of a greenish Bile. The Black vomit was more frequent this year, than before, & no recovery is recorded after these Symptoms, tho' the Patient survived without vomiting for several days after its appearance. In a boy under the care of Dr Physic in the City Hospital, the Black vomit disappeared for 10 Days & before the Patient Died. Death after this came on in some cases with Delirium & Coma & in some cases without any pain & without any influence on the faculties of the mind. A Patient in Almond St. lived in his perfect sense 7 Days after the black vomit.

The Tongue was no guide in this Disease, as in that of '93 & '97. In many cases it was quite natural. This Natural appearance first deceived me & I was unable to account for it. I at length ascribed it to such a concentration of excitement in the Alimentary Canal, that the Tongue was unaffected. Since observing this, I have met with an account of the same Symptoms prevailing in the Yellow Fever of St. Domingo by Dr Clark.

In the Nervous System a new Symptom made its appearance in a Relation of Mr. John Fields; it was a disposition to Bite every person who came near him, similar to what occurs in Canine Madness.

I observed a new Symptom in the Mind. A young woman, my Patient, started as if alarmed whenever a person came into the room, or spoke loud enough to be heard. When I approached to feel her pulse, she started as if affrighted. I since observed it in several of my Patients.

A Hiccough was a common Symptom. In no Cases except two, one of which is Dr Hodges of this City, and another, which I saw a recovery after, this Symptom appeared after the 5th Day of the Disease. In some persons it appeared in form of pain in a particular part of the body, as the Calves of the Legs. And Dr Physic had a case in the City Hospital, in which the Patient, a young woman complained of nothing but pain in her Toes. In this case which proved fatal, the Stomach after Death was highly inflamed. In many uncommon Stiffness of the Limbs appeared, which subsided before Death; and Dr Physic informed me of one Case in which this Stiffness of the Limbs returned in 2 hours after Death as soon as the body was cold. In some cases an obstinate wakefulness occured; also a morbid Sensibility all over the Surface of the body. Both of these Symptoms

speeded to bleeding and Salivation. In one Case it occurred in Dr Physics practice; it continued till within 2 hours of Death, where there was an absence of Pulse, Cold Extremeties, Slow respiration, the Patient exclaimed when he touched the wrist to feel his Pulse. (You see Gentlemen, our Science is an Ocean without a bottom or a Shore) —

Red Eyes occured in yellow fever this year, and was an unfavorable Symptom, different from last year ('97) few recovered now who had red eyes on the first day of the attack.

Glandular Swellings in the Jaws or Armpits were favorable Symptoms. In one of my Patients a discharge of matter from his Ears, relieved of a violent and unpleasant pulsation in the Arteries of the head.

I observed the following exciting causes of the Disease — 1st Swiming 2d Grining — 3d a Vomiting produced by eating Mushrooms — 4th Sleeping under too light bed clothes. In Mr Hill it was excited by laying with but one Sheet on him — 5th a fractured Leg excited the disease in a young man in Germantown. He died with the Black Vomit. I could not but remark the long time which intervened between the action of the predisposing Causes and exciting Causes; 4 or 5 days in many elapsed. In some persons the Disease

was ~~xxxxxxxxxxxx~~ exempted by relinquishing the customary employment. Dr Ronn of Boston where the Disease prevailed at the same time, observed Sixty blood in but one Case of 100.

The forms of the Disease were nearly similar this year to those of '93, & '97. Walking cases were common; here the Miasmata seemed to act as a slow poison. Some cases appeared in Form of Tertian. This was denied a long time by many of our Physicians; but it is a fact, and those cases very commonly terminated in Death. In some the System was depressed below the point of reaction; the Physicians called these Typhus cases. They were generally fatal unless copious bloodletting was used.

Some cases run on to 30 days and recovered; here we again see the impropriety of fitting bowels to the continuance of a Fever, since it varies so much: Some cases terminated in 3 or 4 days, and some continued till the 30th. The same protracted State is admitted to take place in the West Indies in Yellow Fever; yet some of our Physicians deny these to be cases of the disease, and call it Typhus. Dr Sayre informed me of a case of Yellow Fever which appeared in a child, in form of Trachealis Cynanche. I attended one case where there was a profuse Hemorrhage from the bowels, and the Patient recovered by the use of Cordials. I attended several cases this year who had had the

Disease before; and I heared of the Death of two persons (Palmer & Mrs Capper) whom I had cured twice before. They now dis-=sarted me for a Physician who did not bleed, and both died.

I must here retract or qualify an opinion I have made before concerning the Contagious nature of this Disease I did not at the time Know the distance to which Miasmata may be carried. I believe it very seldom was communicated by Contagion. The Miasmata may be conveyed from the put-=rid air of a Ship all over the City. Where it was Contа-=gious, it was from the putrefaction of the purulent matter

I shall proceed to make a few remarks on the man-=ner in which Death made its approaches in this Fever.- 1st. Death in some cases was preceded by Convulsions - an increased action. Life in these cases appears similar to a Watch when the Chain is broken; it runs rapidly for the short time it is able - 2d. It sometimes occured in the Delirium. 3d. In some cases a profuse Hemorr-=hage of the Gums came on just before Death: A case of this Kind occured to Dr Stuart - 4th. With vom-=iting and Hiccough, incessant - 5th. With extreme pain; if we relieved this by destroying excitement we destroyed life - 6th. It came on without any pain often-=times, but often was attended with pleasure - 7th. Pa-=tients would fall asleep and not awake; it was the

case with Mr Hill. 8th The mind in some instances remained torpid, where there was no Delirium, and Death submitted to without a sense of it. —

Lecture 46

Yellow Fever Continued

I shall proceed next to speak of the morbid appearances of the body after Death. The Stomach was always found inflamed. In many cases the Brain was inflamed, and water found in its ventricles; this serum would not coagulate as is common according to experiments made by Dr Woodhouse. The Liver was but little, if at all affected. Here we may observe that Epidemics differ no less in their symtoms, than in their local determinations. Dr Stewart found Biscuit bile in the Gallbladder. Dr Physic found the Stomach most inflamed in those cases where there was least vomiting,

And where the least pain occured, inflammation was always in the inverse Ratio. Hence we may remark that the Causes and their effects on the body are by no means proportionate. A trifling Wound will often produce Tetanus. An Inflamation of the Lungs is sometimes accompanied neither by Cough or pain. These facts teach us to pay attention to the State of the Pulse in diseases of great morbid action, since Pain affords us no important indication of the Danger.

Many disputes have arisen about the nature of black Vomit. Dr Physic has proven it to be a morbid secretion of the Stomach; he further observes that it never occurs tile death takes place in that organ. He saw distinctly lines of a Red colour where it began to separate from the living parts. This discharge ought not to surprise us when we consider that many parts become black in Death, or the matter of a Carbuncle, sometimes as black as ~~a black~~ Ink, and that the Liver when diseased sometimes discharges black ~~vesatted~~ Bile. The Kidneys too discharge a ~~black~~ dark coulered Secretion in ~~some~~ some cases.

The weather during the prevalence of this disease was hot and dry. This had an evident influence on Animal & Vegetable Life. Musquetoes abounded as common

in Sickly Seasons. Grass hoppers covered the ground, in ma-ny parts, and devoured the grass in the Meadows in the neighbourhood of this City, so that the Farmers Univers-ally complained of light crops of hay. Cabage ripened & rotted on the Ground, long before the time they usually ripen-ed. Peaches ripened 2 weeks sooner than ordinery. Apples ripened, and rotted on the trees sooner than ordinery. Cher-ries were very plenty this year. Meteors were very com-mon this year Season. Blossoms appeared on many trees in October, and a second crop of small apples were observed on many trees in November. On the 27th of September there was a white frost; on this the Fivers began to decline, and many of the Citizens returned home; but warm weather returned in October, and the disease revived with increased mortality.

The origin of this Fever was decided by some Put-rid Vegetable and Animal Matter collected in our Streets Gutters, Common, Sewers, Docks; and also from Stag-nating ponds of water in the vicinity of the City — added to this the Foul air emited from the Foul air — Hold of the Ship Deborah.

The number of Deaths this year was between 3 & 4,000, among these were 3 Physicians & 2 Students of Med-icine. — The Fever prevailed this year in many

parts of the United States, besides Philadelphia. In Chester, Wilmington (Delaware) N. York, New London (Connecticut) In Barton & in Windsor (Vermont) In all the above places there is no doubt that it was the offspring of Putrid Miasmata.

We shall next speak of the remedies used in the disease this year. — The Pulse was less active than in the fever of former years; but in few cases so feble action in it as to forbid bloodletting. In Dr Mease it required the abstraction of 162 ℥ of blood; and in Mr Warren a patient of Dr Dewees with whom I consulted, 200 ℥ were drawn before the disease was subdued. There were cases however, where bloodletting was improper, & Nature in many of these cases relieved herself by hemorrhage from the gums on the 4 or 5 day of the disease; this was a happy sign — In these cases the morbid action was so great as to prostrate the system below the point of reaction, from the excessive force of concentrated Miasmata. Having seen the good effects of Emetics in cases of prostrated excitement in the fever of '93. I determined to give them a trial this year; having observed their ill effects in '97, I first prescribed them with a trembling hand, and they operated very favourably in all those cases in which I used them, by awakening the Stomach to Sensibility

to Stimuli, & tending to Equalize Excitement. In many cases no discharge of Bile was produced. The first case in which I used them was in a Mr. Robt. Renshaw. The Patient had been once bled. On the 4th Day of the Disease the Pulse became Languid & slow, the Skin cool & dry, and an hemorrhage from the Gums came on, which frequently — was an indication when accompanied with these Symptoms, of a restoration of action before Death. I gave him 4 gr. of Tart. Emet. combined with 20 g Calomel; I waited the result with anxiety, and it answered my expectations in 2 days he was out of danger; it operated upward & downward in that case, & evacuated much Bile. I tried it afterwards in several patients & with the greatest success. In one case I cured with 2 Emetics. I observed that in those cases in which bleeding had not been used, the use of Mercury enabled Mercury to operate with greater ease. The Stomach sometimes required from 16 to 30 grains to awaken it to action. The use of Emetics is by no means a new remedy in Malignant fever. Dr Cobham whom I formerly mentioned, used to cure violent cases of Fever in Carolina, by exciting an artificial — Cholera Morbus by Emetics. In the Posthumous works of the late King of Russia, there is an account of Malignant Epidemics accompanied with Carbuncles being

cured by the use of Antimonial Emetics; by this practice 97 of 100 were cured.

Purges, were alike proper as in former years. Salivants used Calomel in the first stage of the disease.

A Salivation was found to be an effectual remedy. I did not loose a Single pactient where I produced a Salivation, but it failed in many cases by passing out of the bowels. Dr Rand made the same observation in Boston. The bowels yielded to purges as soon as Mercury acted on the mouth. Opium was useful in preventing the Mercury from passing off by Stool. Bleeding retards much the action of mercury, which it renders more Speedy & certain. But in some of the most Malignant forms of the Fever, the Mercury effected the mouth without bleeding; namely, in those cases where there appeared indirect debility, or a prostrated State of the System; here Vene Section was improper, and Mercury was used with great success. The indirect debility from the violent action of the remote cause, retards much the action of the Medicine (where the System is prostrated) Here the Disease does that by its force which we attempt by Deplotion Now & then the Salivation continued for weeks & even Months after the Disease subsided. In those cases Dr Physic discovered that the Salivation was caused by

Carious teeth, or Jaw bone which must be extracted, when it ceased. After Bleeding has been carried to some considerable extent, the Disease may be cured by Sweats. This was performed in a manner I have before mentioned. My Patients were wrapped up in a great weight of bed clothes and exposed to the Steam of Vinegar or Water under the bed clothes by means of heated bricks wet with these substances. It was continued for 6 hours, & then intermitted, & repeated twice or thrice a day for 4 or 5 days. Where the Disease run on to a slow Chronic form, I used Blisters with good effects, — especially if wakefulness attended; but they were less effectual than in former years. If the fever assumed an Intermitting Type, I gave the Bark with very great advantage. In the Slow Chronic State, I also used Laudanum with great advantage. To relieve a distressing Vomiting which sometimes occured on the 4th or 5th Day, I gave a Julep composed of Salt of Tartar & Laudanum. I also tried & with ~~no~~ Success Dr Stafpacks remedy of Milk & Lime water. I dont Know that I saved a single Patient by these last remedies, but I am certain that I relieved many from a great deal of distress. Before I leave this head I will mention a remedy introduced into Practice by Dr Stuart. It is to relieve a distressing Pulsation (not very painful) which occurs in the Arteries of the Head. —

A Ligature tied tight on one of the extremities. The remedy is ingenious;; it serves the purpose of partial depletion, by preventing the return of the blood from the part. It should be used in all cases where this occurs, & V. S. is opposed.

North of the Signs of Danger which occured this year, and Prognosis. I saw very few die who had hemorrhage from the Gums, when it came on the 4th or 5th Day of the Disease; and what is remarkable, very few recovered who had this Symptom in the year 1793. — 2d. I saw 3 instances of recovery this year after Convulsions; in 1793 none recovered who had this Symptom 3d. All died who had a dry or sore throat attended with hoarse Voice; whereas in '93, this was a favorable Symptom. 4th. An absence of pain was a very unfavorable Symptom. 5th. Small & frequent Stools was a very unfavorable sign, Red Eyes were also a bad Symptom 6th. Where the appetite for food continued for 4 or 5 days without Cessation of Fever, was an unfavorable Symptom. Want of Delicacy in lying with parts uncovered which are usually covered, is a bad Sign; very few if any recoveries after this. Boccaccio takes notice of this in the Plague. He tells us that Young Ladies of the first rank & greatest modesty delicacy, when ill of this Disorder suffered themselves not only to be waited on

but seem to be cleaned by Male nurses in Italy. I before remarked that a natural Pulse was a bad sign. A black moist or natural Tongue was unfavorable: These Symptoms were uniformly fatal. A desire to go home when a Patient was abroad, or to sick out was always a fatal Symptom; it proceeded from an insensibility to danger; it was a common forerunner to Death in the City Hospital. Many died in the act of escaping themselves.

From this History of the Symptoms and Prognosis of the Disease, you see Gentlemen, how utterly imperfect all account of Epidemics must be, which are not accompanied by an account of the Climate, Season and a variety of other circumstances, since it changes so in every Symptom. As well might we consult the old Almanacks to determine the State of the ensuing Weather or an account of an old Epidemic to prescribe for remedies to cure a prevailing one. In fact an Epidemic abstracted from Climate Season, alternation of weather Rain &c &c. is a non entity. It becomes a reality only when we come to prescribe for it from the experience of former years, and attend solely to the State of the System. Dr Sydenham confesses that he lost 4 or 5 Patients in a new Epidemic always before he learned the true Character and Cure of the Disease.

Hillary makes the same observations with respect to the fevers of Barbadoes, and the influence of the weather upon them. What would you think of a traveler who would attempt to describe to you a new Country by relating to you the State of the air, and an account of the fruit & vegetables acquired during a single Season Spent in it? Equally obscured is that account of an Epidemic which is made without attending to the changes in its causes & various Phenomena for more than one year Season. It is owing to Physicians not attending sufficiently to to the difference of Season and Climate, that the first accounts of the same disease are so contradictory in them selves. Thus Mr Bell cured all his Patients in the Bristol Indiaman by Calomel. Dr Trotter tells us that in the Epidemic which prevailed at Halifax, but 3 out of 100 died. In this City during the Fever of 1793, one died of every 20. In 94 but one died of 50, And in 97, and 98, when copious depletion was used from the commencement of the attack, but 1 out of 100 died.

Cure. Three methods of cure prevailed this year One by Lenient Purges, Castor oil, Cooling Glysters & combined with the warm Bath. This was practiced chiefly by the French Physicians, & was very Popular. People said it did no harm to the Constitution &c.

2d. By an exclusive reliance on a Salivation; this was practiced by a Dr Kinlard. 3d. By using all the remedies mentioned for the cure of this Disease, by Physicians who attended chiefly to the State of the System as medicated by the Pulse; This was in use among all the American Physicians. The first Seth cured only slight cases which would probably have cured themselves. The 2d mode of practice was successful only in those cases which would have cured themselves, or in such as the System was prostrated below the point of reaction. The last were by far the most successful, and cured almost all cases where they were called early. From the Histories I have collected 1/2 of such cases were cured.

We may here remark that in curing the Yellow Fever of this year, the Business and Reputation of a Physician, were in an exact inverse ratio to his success in Practice. Such of my Patients as I cured in '93 and '97, for took me now, for Dr Kinlaned & the French Physicians. The mortality this year was proportionally 4 times greater than in former years. The Citizens were generally out of Town, and yet as great a number were affected with the Disease as in '93. — The increased Mortality arose from the prevailing opinion of the Nature of the Disease and

and its origin: Some calling it a putrid disease of great debility. The Practice of the American Physicians was said by the Citizens to be most fatal. This opinion is false. Those opposed to it said the cases which the American Physicians cured were not cases of the Yellow Fever; but other mild diseases; and all the fatal cases were said to be Yellow Fever.

I will proceed next Gentlemen to make a few observations ~~of the yellow Fever~~ on the Peculiarities of the Yellow Fever of 1799.

The Yellow Fever of '98 was succeeded by an highly Inflamatory Catarrh, which prevailed in the City; and a few cases of Erisipelas occured. The Winter was very cold in the Month of December we had several falls of Snow. In Jany about the middle of the month, (1799) the weather became very mild, and the Navigation of the Delaware was opened. Several violent cases of Cholic now occured. In the latter part of the month Dr Physic called me in consultation in a violent case of the Yellow Fever, which terminated fatally. A Mr Isaac Warner. Dr Physic informed me that he had at the same time, 2 or 3 cases of a similar nature in his practice of a malignant Bilious Fever. From the 6th of Feb the weather became cold

and continued to till the month of March. The News papers informed us the weather in Europe & Canada had been uncommonly severe. About the 15th. of March — Bilious Inflamatory diseases appeared, and a few cases of Yellow Fever, which yielded to bloodletting Purging and an antiphlogistic course. May was uncommonly — cool and uncommonly healthy: but in June highly Bilious fevers made their appearance. about the 13th of the month Dr Physic lost a Patient with the Yellow fever. on the 21st a young Merchant died of the Disease. between the 22d. & 29th Several cases occurred. It was remarkable that the Inhabitants of — Keys's Alley predicted that the Yellow Fever would prevail this year, from observing a Smell similar to — what they observed in Smelled before the Fever of 93. Emitted from the Trees before their doors.

In the beginning of July, the City was alarmed by Dr Griffiths who published that Several cases of the — Yellow Fever had occured in Penn St. under his care. This at first was not believed, because as — yet no vessel had arrived from the West Indies to which its origin could be attributed, owing to the Strictness with which the Quarantine Law was enforced. At length however, they found a Vessel

that had arrived in a short voyage from the West Indies one day before the Quarantine Law commenced operation, Viz. on the 14th of May. This was not an explanation, and the cases were traced to this Vessel!!

The State of the Air during the latter part of July & beginning of August deserves attention. The weather at this time was. . . . . .

The Fever increased in all the filthy parts of the Town, near the Wharves, Docks, Sewers &c. in Water & Penn Streets. It was observed about the 4th of July by the Farmers in the City and in Delaware State, that Fish, Oisters, Geese, Ducks &c &c. had an unpleasant taste which rendered them very unpalatable. Musquetoes abounded. The Crops of Grain this year were very great. Garden Vegetables were very plenty, but of a small size. Apples & Fruit in general very Scarce; And on the Potatoe Vines in August, a new Species of Fly appeared which destroyed them very much. This Fly was discovered to possess the property of Blistering as well as the Spanish Fly; and like it, produced Strangury.

The Disease which now increased was supposed to have been Imported. It resembled the Fever of the preceding year in all its

Symptoms, and upheld to the same treatment. Whence are we to account for this increase of Insects which occured? Whence this sudden appearance of New Insects? Were these animals wafted over with the Animal Poison by the Air from Spain? Or were the Eggs from which they were hatched, conveyed in the hoops of Hogsheads, Casks, in Bales of goods from the West Indies? I call upon the Advocates for Importation to answer the Questions. It was certainly owing to an alteration in the Air, which influences not only the health of animals and Vegetation, but is no doubt sufficient to explain all the Concomitants of Pestilence. The disease was, as in former years, of Domestic origin.

I am thus particular Gentlemen on the Subject of Epidemics, to impress on your minds the importance of Keeping an accurate account, not only of the History of the Disease, its Symptoms & cure, but also every circumstance connected with it. I have kept a Note book ever since the year 1778, in which I have regularly entered one account of the Seasons, and the diseases as they occured. The mode of treatment most Successful &c.

From the middle of August, the Disease extended to all parts of the City. Two Publications were made by the Academy of Medicine, in consequence of which the desertion of the City was much more speedy & general this year

than at anytime heretofore; and in this way the ravages of the Disease was probably prevented.

I shall now add a few remarks on the treatment and Symptoms of the disease this year. The Arterial System was much affected; The Pulse was quicker & more frequent this year than last, and kept quick in many cases after the black Vomit. Delirium was less frequent this year than last, especially in Adults; it seldom ensued in them. In Children the disease after terminated had sometimes a determination to the brain. No new Symptoms occured in the Stomach & bowels: Vomiting was as usual, an attendent. A Diarrhoea sometimes appeared and the disease often past on the appearance of Dysentery. Worms were sometimes discharged per Anum; this Symptom appeared in a Girl of Mr Shortall. I mentioned this appearance in an account I published in Vol. 1st of the Fever of 1762. The Blood preserved its usual appearance; it was seldom sizy till after copious evacuations The Tongue was of a Whitish, tho' sometimes of a reddish appearance: In two cases I saw it yellow, and in some few it was black. Stools Whitish in some cases. In a Miss Shortall an eruption of pimples occured about the breast — It appeared in some patients in the form of a Tertian Quartan.

The remedies here as for the cure of the fever disease in former years, Viz. Purges, Sweats, Vomits, but above all the Lancet and a Salivation. An Emetic before much action had taken place, cured many cases of it. (in forming Stage) And after depletion was in some cases of use. The Purges used here, Calomel, Jalap, Castor Oil, Salts &c. in the order set down. I prefer Calomel, but where the System is prostrated below the point of reaction, Sweating was used with advantage. Many Patients recovered before the Mercury had time to touch the mouth.

I am an Unbeliever in Specifics; I by no means assert that any one of these remedies will cure the Yellow fever, but I do believe, they will when used together with propriety.

All the Emunctories should be excited into action by these remedies. I compare the Disease under these circumstances to a Cloud charged with Electricity, passing over a large City, where it becomes disarmed of its Terrors, by the numerous Metalic Conductors, which Robit of its Electric fire. I would therefore open the Pores of the Skin. Vomit, Purge, &c. according to Circumstances & State of the of the Disease. In many cases Blisters to the Stomach & Extremeties were used with advantage. In other cases where the Disease assumed the Type of an Intermittent Bark, Wine, Laudanum &c were used. Ether I found

of singular benefit in many cases this year

Prognosis. Several cases occured this year of bleeding at the Gums & mouth: this was a dangerous Sign. Dr Physic observed a Symptom this year, which he says always terminated fatally - A Sighing of the Patient before he could speak after waking.

In Speaking of the above enumerated Remedies, I do not include patients in the Hospital; there are upwards of half died. Private practice was as usual Successful but Patients came in with the most unfavorable cases some ill for many days picked up in the Streets, and their Constitutions generally worn down with Intemperance.

Of the Yellow Fever of 1800.

About 50 or 60 cases of the Disease occured this year in the neighbourhood of Dock Street principally - I find the following observations recorded in my note book dated 22d June 1800. "From the appearance of our usual "Intermittents this Spring, yielding to the Bark without "bleeding; from the coolness and dryness of the weather; the "favorable State of Vegetation; I think it probable we "shall escape the Yellow Fever this year". Some of the cases which did occur, were so feeble as to yield to the Bark without bleeding.

Thus Gentlemen you see, from an Idea of the Domestic Origin of the Disease, and not believing in the Idea of its importation, I was able to predict that it would not occur this year. Tho our Knowledge of Epidemics is yet in its Infant State, I trust the time will come, when from the influence of Seasons &c. &c. &c or other diseases, or Vegetation, or appearance of Insects &c. &c. we shall be able to calculate with as much certainty, the return and approach of an Epidemic Fever, as we now do of a Comet or an Eclipse!! —

Before I conclude this Lecture, I shall make a few observations on the Mild Bilious State of Fever. This differs from the Malignant Bilious Fever, only in Force. There is not always a discharge of bile in it. The Remedies are 1st. Bloodletting when the Pulse is full, frequent &c (Synochus) — 2d. Vomits are useful in it especially if bile abounds. — 3d. Purges, and for the same reason, to evacuate bile. — 4th. Diluting drinks should be used. — If the Pulse will allow, 5th. Bitters, as Cascarilla, Quassia, Camomile, or Centaury tea, Gentian, Colombo &c.

For a particular History of the Symptoms & Cure of this Disease, I refer to writers. & particularly to Sir John Pringle Clarke, Colleghorn &c.

Lecture 17th

We have now Gentlemen, treated of all the Symptoms of Malignant State of Fever, and proceed next to Speak of the Practice Prophylaxis of the Yellow Fever. What I shall deliver on this Subject is the result of observation & Conversation.

The First Remedy by way of preventing this disease is, a Low Diet, principally of Vegetables with a little Animal meat. There is a fact mentioned by Mr. Brown which appears to favour the truth of this. He says the Inhabitants of Naples escape the Plague by living Pepper & Rice as a Diet. This acts feebly on the Stomach. In the using this however, care must be taken to accomodate the Exercise to the quantity of food. Mr Webster has observed that many Physicians were destroyed by the Fever of '98, by not attending to this circumstance. They used too much exercise for the manner in which they lived. Mr Elicott Geographer to the U. States, informed me that all his Companions in Public business escaped Yellow Fever for 2 or 3 successive years, when exposed to it by living abstemiously; and that 4 of them who did not follow

follow the example of the rest, took the Disease and died. Many other similar cases could be mentioned.

2d. Keeping the bowels gently open were an excellent preservative against the Disease. Some Physicians used a Mercurial Pill every day for this purpose; but perhaps a better method is to chew the Root of Rhubarb.

3d. Continueing an habitual occupation while the Epidemic prevails. This ought always to be done. The day Labourers, who were employed to Cleanse in the year 1779. for the purpose of cleaning the Streets, were almost all seized with the disease soon the change in their customary employment; care however, must be taken to avoid Fatigue; thus, a Carpenter will not be at all fatigued by working all day at his accustomed business, whereas, he would become tired from rowing a boat 2 or 3 hours, and would probably Sicken in consequence.

4th. Keeping up a constant equable perspiration, by wearing Flannel, or at least Cotton next the Skin, and by the use of warm bed clothes. I have scarcely heard of a single person who took these precautions being seized with the Epidemic; on the contrary I have known many cases of Death in consequence of persons ceasing to sweat freely. This fact

is also well known in the Eastern Countries where the Plague prevails; thus Mr Volney tells us the usual Salutation during the Sickly season, is not "how do you do? but "how do you sweat?"

5th The smell of fresh earth prevented the disease in many persons, as the diggers of wells & Cellars, also the cleaners of the Streets. These uniformly escaped the yellow fever in this City. This fact Gentlemen was not first observed by a Medical, but by a Military Character, Count Saxe, in his Reveries (Not ever dictum). —

6th The warm bath; this presented it, & by depletion it procured a discharge of perspiration, abstracted a collection of sordes from the Skin; and the exercise of sleeping too a spirited the perspiration.

7th The exhalation from Tan Pits; and also from the volatile Gas from the manufactories of Sal Ammoniac, prevented the disease in all the persons who lived in the vicinity of such Manufactory in the year 1793. Smoke has had the same effect, as observed by Mr Bruce and Dr Clerke. Garlic. This is a most excellent preventative against the Yellow fever. In writen stating the virtues of this Substance, I have been puzzled to find why the Author of Nature has given to it such a very disagreeable smell. Perhaps the reason may be to

* Quere, should it not be Allia?

prevent its coming into general use, as its virtues would by habit be destroyed. It posesses in this instance all the virtues without the ill qualities of Opium, ardent Spirits &c. Cordials are a feeble substitute for it. It posesses, in short as a preventative, all the virtues of the different articles of the Materia Medica. Sir Wm. Temple tells us the Pyramids of Egypt were built of Garlic. that is, the workmen, engaged in building them, lived wholly on Garlic during their employment. The Children of Israel were supported by this vegetable during their Laborious Captivity in Egypt, and languished for it where they were forced to live on Manna in the Wilderness. It was an article of Diet among the Romans. Virgil and Horace speak of it as the food of the Reapers during the Harvest. Horace complains of not being able to digest it after he had eaten it

"O! dura Messorum ilia."

Virgil tells us that the Country People mixed it with Thyme, and gave it to their Reapers.

9th. The daily use of a table spoonful of Sweet oil, was supposed of great use in 1798 as a preventative and I believe with truth. It might act either by defending the Stomach from the action of the miasmata, or might obtained by mixing with it. The

Miners who work in Lead, prevent the ill effects of the fumes of this baneful Mettal by eating Fat Pork; and it is a fact that a Poisoned Arrow will not hurt a hog, provided it comes only in contact with the fat of the animal.

10th Washing the body in salt water has been recommended as a preventative of the disease, I have heard the disease is thus prevented very often in the West Indies, where the Practice is very common.

11th By means of Palm Oil, on the body, of 25,000 persons destroyed in the Space of 4 years by the Plague in Egypt, there was not among them one Oil man. The Inhabitants of the Several Nations of Africa, are in the practice preventing the disease, which proceeds from Exhelations of the Shores of the Rivers, and is no doubt the Yellow Fever.

12th Of 25 Watchmen who lived in this City in the year 1793, but 3 or 4 died. To what shall we attribute this? Is it owing to the greater purity of the Midnight air? They walk from the beginning of the Night till Morning, but go home before the Sun is up, and before the effluvia escapes. The Precipitation of the Effluvia at night we have before hinted at. Linn takes notice of the Farmers who rise early, and the Midwives at

Baldness; and he ascribes their long lives to their being out only during the Night; hence they are called Mother-Midnights. I formerly observed a fact which is mention-ed by Ulloa, in his travels thro Cuba, of a custom the Spaniards have of preventing Epidemics. Whenever the Spaniards in this Island get moderately wet by rains &c. in the Sickly season, they plunge compleate-ly into water so as effectually wet themselves over-Does the water in this case concentrate the Miasmata, and does the subsequent water wash it off? - Dr Gallapin used to keep a blister open constantly in his arm, to prevent the disease; he took the Idea from Dr Hodges Ipsac in the Plague.

Another mode of preventing it, to be attended to is; avoid all fatigue at any kind of exercise, especially running, fishing, swimming: and lastly to take greate care to avoid all the exciting causes of the disease; Excess in eating, drinking or Venery; excessive actions of the passions of the Mind. Intense Study, and all the rest of the debilitating causes before enumerated; avoid new Aliments. The Yellow fever seldom if ever is brot forth without the concurrence of an exciting cause. In the Plague & Hydrophobia, the case is different, the remote cause —

frequently excites the disease. I did not know of a single instance in which Tobacco prevented the disease, now in '93. There is one Prophylactic remedy Gentlemen I have not taken notice of, and which I would not advise you to use; I mean Drunkenness. I knew 2 persons, and one of them a Physician in the year '93, who escaped the Yellow Fever by being constantly drunk; but let me add a caution, If ever do incline to use this remedy, beware of being sober a single moment; the shortest interval of Sobriety terminates in the greatest danger of Death.

In the Prophylaxis of the Intermitting Bilious Fever, one circumstance only differs - Diet, this should be generous, so as to overcome the force of the action of the Remote Cause.

The next in order is the Sweating State of Fever. It occurs in the Plague, Yellow Fever & in the Small pox, according to Dr Sydenham. It occurs likewise in Pleurisy Rheumatism, Intermitting Fever, & lastly in Mania; of this last I related a case where the Patients Cell (in the Hospital) was filled with a mist of perspired matter. It is the effect only of morbid excitement. The Sweating Sickness of the English

is a form of the Plague, of which this is a constant Symptom. Depletion & particularly bene Section cure it. It is a mode of Natural depletion in it self, we only ajist Nature by abstracting Blood.

Burning Stage of Fever.

This is either general or particular. It consists in intense heat, which is most commonly partial, in the face Limbs, Breast &c. It is the Ardent Fever of Dr Moseley; and was supposed by the Antients to be a Specific Fever. It is no such thing but merely a Malignant fever in an artificial form, as it always in Malignant fever Plague, Yellow Fever, and in some Malignant cases of Pleurisy; tis the Causus of the Antients. This stage of fever occured in an Epidemic that prevailed in Rhodeisland in the year 1723 according to Mr Webster. he says the People called it the Burning Ague, and justly adds that it was a mortal bilious Fever.

Remedies . . . . . .

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Cold Stage of Fever.

In this Stage the Patient is very chilly, cannot

bear his arms out of bed for the cold. This coldness is sometimes general, & often not; it occurs in Yellow fever. It differs from the cold fit of an intermittent, in not yielding to Cordial Remedies, or the hot bath, but only to repeated Bleedings. Mr Webster takes notice of a ravenous appetite for food which occured in the cold State of fever at Bayberry in 1683. The cold State of fever occured in the Yellow fever of 1793. Patients would complain of a door opened in the hottest weather, and could not bear their arms out of bed &c. In many the feet were very cold; in one case in particular a Lady was troubled with them cold feet. the 3d bleeding She exclaimed her feet were warm as the blood flowed. It appears to be a predisposition to death.

We come next to treat of the

Intestinal State of Fever.

This appears in 4 forms, of Cholera Morbus, Dysentery, Diarrhoea, and Colic.

The Remitting and Intermitting Bilious fever often assume all these 4 different forms. They are the "Febris intestinalis" of Dr Sydenham.

The Cholera Morbus is a true Yellow fever thrown upon the Bowels. It is the highest grade of Intestinal

Fever, which happily cures itself by depletion. The Dysentery may be considered in the same light. the reason it is less fatal, is that it is generally treated with purges. — Diarrhoea, is nothing more than the common remitting Bilious fever; and Cholic may be considered as both according as it assumes a more or less malignant aspect.

The Remedies should be such as to cure the Disease of which they are only modifications;

Cholera Morbus, was generally cured before the year 1793 with Laudanum, Since that time Bloodletting has been requisite. It occurs sometimes with a Purging only, sometimes with a Vomiting only, and more commonly with both. In Mr. Saml. Coats, I was forced to bleed 3 times before I could cure this disease. 'Tis the offspring of Miasmata, and of Contagion.

Dysentery, is also the offspring of Contagion and Miasmata, but proceeds from a weak state of the bowells acted on by many other exciting causes. It occurs more in high Situations, than in low ones. Where Intermittents prevail at the declivity of a hill, Dysentery prevails at the top, owing to the cool air repelling perspiration, which is turned in upon the Bowels. In Germantown, and the range of hills at White Marsh Intermittents

never occur, there Dysentery prevails. At the declivity of hills the reverse of this obtains; here Intermittents prevail, & Dysenteries are unknown. 2d. Dysentery occurs at the fruit season; this is owing to this Vapid Aliment debilitating the bowels, and rendering them more liable to the action of disease. 3d. Dysentery in some places alternate every year with Bilious Fever. At Nevis I never this fact was observed, here the Domestic origin of the Dysentery was allowed, and yet the Bilious Fever was said to have been imported in a Sailors Jacket. They were the same disease. 4th. The Dysentery affects Country People more than the Inhabitants of Cities, from the less Tonic nature of the Diet of the former. 5th. It is more fatal to young & old people than to those in middle life. It is a most fatal disease when neglected in the beginning, as in the Country where a Physician is seldom called in in its first stage. Dr Clarkson informed me of a case of this Disease that went off in a Spontaneous Salivation. I have known it subside in a violent Opthalmia; and I have also seen it terminate in Rheumatism. Why not? We Know that Dysentery is a form of Fever, and we Know that Fevers often change their form: here the Intestinal changes to the Opthalmic State. I have likewise seen in one or two instances Cholica Pictonum, go off in a pain of the extremities. →

Dysentery always comes on with great morbid action in the Intestines, attended with increased Peristaltic motion; a Stoppage of the secretion of Bile & consequent costiveness from the absence of this Stimulus. Here then is another Striking affinity of Dysentery with Yellow Fever. In the worst cases of Dysentery there is no secretion of Bile.

Purges taken before the disease is quite formed, or where it prevails in the Neighbourhood has prevented the Disease in many cases. Colonel Finelly, a man of benevolent disposition (Note M. C.) informed me of a fact in proof of this assertion. When his company was quartered at Perth Amboy, the Dysentery prevailed among the Inhabitants being near the Sea, he obliged every man to drink from half a Pint to a Pint of Sea water, which purged them & prevented effectually, every man from the Disease. He afterwards applied this principle with success in his Neighbourhood when he prevented many cases of the Disease.

The Remedies for the cure of Dysentery are, 1st. bene Section, especially when indicated by an Inflammatory State of the Atmosphere. I have bled 3, 4, 5 and even 6 times in this Disease. In one case of a Child, 2 years old I bled 6 times. 2d. Vomits; these should be used more especially if any sickness at the Stomach prevail. 3d. Purges, Lenient Senna & Manna tea, Olive & Linseed oil and the like, or,

Secondly, acting as Castor oil, Rhubarb, Jalap, Calomel &c. 4th Diluting Drinks; they obate acrimony in the Alimentary Canal. 5th Demulcents, as Flaxseed tea Barley water, Harthorn shaving, White decoction ance the like. They should be taken by the mouth & also as Glysters: other mucilaginous Substances may be used for the last. 7th After sufficient depletion Glysters may be used with advantage, they should be given third the day, and large doses at night; these may also be injected by Glyster. 8th Blisters. These act by translating morbid excitement to the Skin, & are very useful from the intimate connection between the Skin & Alimentary Canal. Dr Theiry has justly compared them to Antagonist Muscles. Their connection is illustrated by the fact began greated from Dr Hartley, of a Whipping preventing the operation of an Emetic in a Dog. 9th The Bark. The Pains & discharge in the Dicentery are sometimes periodical, here the Bark is of great use in the Intervals. Dr Mosely prescribed it in this way. Lastly where all these remedies fail a Salivation should be excited; of this Dr Clark speaks in high terms: by exciting an artificial disease of the mouth, we divert morbid action to a part less vital.

Mr Elliott informed me that the Spanish Soldiers who are free from the Dysentery when other people have it, prevent this disease by living on 4 Red Peppers & a Sallt

Herring pounded together in a Mortar, for their Breakfast: This I suppose acts by increasing the excitability of the Stomach & Alimentary Canal; but in such a manner as to allow it to reject from the Stimulus of Contagion or Miasmata.

In some cases the Disease is cured, but there remains what I have termed Dysentericula, or Chronic Dysentery. of feble morbid action, but accompanied by frequent Bloody Stools, & pain in passing them. It lasts in some cases for months, and I have known it continue for 2 years. Dr Linn speaks of it. Tonics should be given — especially Bark & Steel, if these fail, Mercury so as to touch the mouth. Sometimes the Baths have cured it. Riding on horseback is of great use. Change of Climate. Astringents, as Gum Kino, Chalk Julep, Galls &c. must be used if only a Diarrhoea succeeds.

Colic. Is the next form of Bilious fever, tho' it sometimes occurs without Bilious fever. It may be known as Bilious fever, 1st By Bilious fever being Epidemic at the time. 2d by a Chill preceeding it; this was observed by Dr Sydenham always to precede Bilious Colic. 3d By a discharge of Bile by Stool & Vomiting. 4th . . . . . .

. . . It was Epidemic in whole Counties in '93. and according to Mr Webster is so in Europe. The Remedies for it are the same as for Bilious Fever. Bloodletting, Vomits, Purges, Blisters, Glysters, Hot & Cold Bath, Mercury.

Lecture 48th

The sixth in order is the

Pulmonary Hall of Fever.

This includes Pulmonary Vera, Pneumonia-Notha, Pneumonia-Biliosa, Wich is sometimes Synochus, Synocula or Typhus, — Catarrh, Influenza and lastly Pulmonary-Consumption.

I on an account of each of these I refer to books, especially to Dr Cullen. I have only to add to his account of Vera, the following remarks, 1st. That it is one disease, whether seated in the Pleura or Lungs; and it is impossible to distinguish from the pain, whether it be Vera, or Notha; to distinguish which has been that, by some of great consequence. 2d. The Pain is by no means confined to the Breast in this disease, but extends sometimes to the Shoulders & back as low down in some cases as the Kidneys, for an affection of which it has sometimes been mistaken. 3d. In the most acute Pneumonies, there is sometimes an entire absence of pain; here action transcendes the Painful Point.

4th. In some cases of the most acute Pneumony, there is an absence of Cough. For this fact you will easily account, The force of the Disease is here too violent to admit of any other action. The System is here similar to that State of it which occurs in some Stages of Yellow Fever, where the Stomach is so highly diseased as to have neither pain or Vomiting - 5th. This disease is very apt to recur in those who have had it; thus I lately cured a Citizen of this place in his 24th or 25th attack of Pleurisy - 6th. It is a rare disease in uniformly cold winters, but prevails most in variable weather; hence we find it unknown in the Northern Countries of Europe, & in Canada; it reigns only in variable weather. 7th. It is a Symptom of the following Diseases - Small Pox, Gout, Rheumatism, Influenza, like wise Gun shot Wounds, & several contusions of the Breast - In some cases it is a Symptom of Bilious Fever. It occurs most commonly from the sensible qualities of the air; but as I have said, I have known it attend Small Pox, and indeed, it is almost a constant attendant of this disease, when taken in the Natural way. In Gout & Rheumatism, it is a frequent Symptom. Where the Lungs are wounded, or the Breast severely contused, Pneumony frequently occurs.

The Remedies are first, V. S. This should be very copious. I have bled in a Pleurisy excited in an

Officer by a Musket ball, to 140z. We are forever bejeadin
at liberty in this highly privileged Disease, to take from
10 to 140z of Blood. If the Pulse is tense & Pain & Fever contin
-ue, even after an absess is commenced, bloodletting should
be continued. The Blood is by no means always Sizey in this
disease; the first bleeding is seldom is, and sometimes not
till the 2d or 3d, or even the 6th This I formerly explained
from the action of the Disease being too quick to produce
Sizey blood. — I must introduce two observations here,
the first is that you are not to be limited by the name
of the disease to a certain number of bleedings, nor de-
termined by the time of Bleeding, be entirely governed by
the State of the System. Some Authors say bleed 4 —
times in Pleurisy; Some tell you not to bleed after the
... day of the disease. 'Tis absurd, bleed where ever the
State of the Pulse indicates it, even after the absess
is formed it is of use, & not only lessens Pain, but dis-
poses to absorption of matter. The next remedy is gentle
Laxatives; it is of consequence to keep the Bowels
open; here Salts answer the purpose very well; but
Calomel, especially combined with Nitre, & Emetic Tartar
in Form of Antimonial Powders, I prefer. Blisters to
the Sides & Breast. In this disease Gentlemen, I
would not wait till the Symptoms are lowered by

Depletion to the Blistering point. I agree with Sir John Pringle, that Blisters may be applied on the 1st. or 2d. day

2d. Diluent Drinks. Should be used. Senega Tea has been highly celebrated in the cure of Pneumony; it acts by producing a Diaphoresis without stimulating much (by distention only) They are the most useful after the System has been reduced by bleeding. Opiates may be given after the System has been reduced and the Patient is much troubled with Cough. They are the best given in

3d. Demulcent Drinks, as Flaxseed Tea, Barley water, and the Liquorice Julep I find answers the purpose very well. Antimonial Wine may be added.

4th. Expectorants may be prescribed with advantage, as Squills, Gum Ammoniac, Volatile Salt, Sal.., Tincture &c. When from the Prejudice of your Patient or friends you are unable to bleed, then may be used with advantage. I prefer the Volatile Salt in the dose of from 1 to 5 grains, made into a Pill. Dr Sydenham used to say every Fever, that the best way was to drive off the Cough through a Vein

Pneumonia notha. This differs from Pneumonia vera, by being brot on by more predisposing Debility; hence we find old People & Children more subject to it than middle aged; also it occurs from this reason in persons

who have just recovered from an attack of Bilious Fever. In this Disease the Lungs are engorged with blood; this Engorgement I have denominated an Apoplexy of the Lungs It prevents the usual toning on the Inflamatory action. Hence in Pneumonia Notha, the Pulse is soft & perfectly ~~exact~~ regular. In the worst cases of it I have ever seen, I have found not the least deviation from health in the Pulse. In some cases there is both Pneumonia Vera & Notha: here parts, only, of the Lungs are in this suppressed or engorged State, while other parts are in an inflamed State; and in these cases the Pulse are quick and irregular.

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many cases from the beginning to the end of it; and in other
cases the pain is exquisite — The Pneumonic Mothe is —
sometimes produced from the sensible qualities of the air,
and sometimes destroys life in a day or two, or even in
a few hours: but sometimes it is a Symptom of Yellow
Fever, Influenza, Gout.

The Cure consists in Copious Bloodletting. —
Bleeding should not be performed here as in Pneumonica —
but Sparingly, but 20, 30, 40 ℥ taken at once; now are to
bleed as in Pneu but once or twice, but bleed till the Patient
can alter his Position. After very copious bleeding, Blis-
ters should be applied to the Sides Breast & parts affected. —
The Vapour of hot water should be inspired by the Patient. —
When much depletion has been used, and the Disease is some
what relieved, especially if a troublesome Cough attend
Opium may be given and with great advantage. —

The next form is the

Pneumonia Biliosa. 1st. This is known, by
its occuring at first with Sickness or Vomiting; with
Yellow Eyes, Sometimes with a Slow Intermitting, &
in some cases, with an almost insensible Pulse. —
2d. . . . In Jamaica observed this almost insensi-
ble pulse in this disease. 2d. It may be known by its
occuring often the Season of the year when Bilious —

or Yellow Fevers prevail. as it attacks generally persons debilitated by a fit of Yellow Fever; hence it occurs frequently after an attack of autumnal epidemics. After the Yellow Fever & Plague it generally proves fatal. Many died of it Mr. Webster tells us, after the Yellow Fever of '94 and '95 in parts of the United States.

Remedies. Copious V. S. more copious than in Pneumonia Acuta. Where the Pulse requires, it may be carried to great extent. 2d Purges. Them should always contain Calomel; but great care must be taken to keep the bowels open by Lenient Purges or Clysters. 3d. Vomits. Them have been used with advantage where the Stomach is oppressed with Bile. 4th Blisters. 5th Diluents. 6th Demulcent drinks. Sometimes the Arteries are prostrated below the point of reaction, here the Pulse is feble and soft such as occurs in some stages of malignant Fever; in this stage of the disease there is a great difficulty in breathing, or rather a laborious Respiration. Here the Lancet must be sheathed. V. S. is improper in this state. Perhaps some relief may be obtained by a few cups applied to the part, so as to deplete locally, but copious V. S. must not be used. Purges may be administered, & afterwards Tonics, especially the Virginia Snake root, with

Laudanum, Wine, & above all, the Bark. I have twice seen the Disease in this Form, once in a Medical Student by the name of Coley, whom I bled twice, & at each time he was evidently by worse for it, and it was with difficulty that I afterwards raised him by the Bark. The case occurred before the Inflammatory Constitution of the air prevailed. You see Gentlemen, I do not teach you to bleed in every disease, on the contrary, these wells will bear witness that in some States of fever, I forbid the use of the Lancet, Viz. Where the System is prostrated below the point of reaction, & when morbid action is so feeble as to be overcome by stimuli. It has been the fashion in all ages, for Physicians to rely exclusively or principally on one Remedy, thus, Bertholine relies almost exclusively on Snow, Piso & Helvetius Semiruba, York & Hunel Shaw on Cups to the affected parts, Sutton on Calomel, Smith on Copper & Iron; since he is called Copper & Iron Smith; M.r Bricke on fixed air, Beddoes on the gases & Digitalis. Some Physicians have relied for the cure of a disease, exclusively on a Bath, others on a low diet. Some exclusively on exercise, as the late Dr Johnes. Some solely on the use of Mineral waters. But why — Should I speak of the predilections of particular Physicians, to particular Remedies? While the Trade Nations are distinguished by their attachments exclusively

to some, as the Chinese to Caustics & Frictions; The French to moderate V. S. & Glysters, & also dilluent drinks called by them Ptisans, - The English rely on Sweating or Sweating Blisters & Cordials; the Italians on Cupping - The Russians on the Hot & Cold Baths; the Germans on

[illegible] called

alteratives. I include all active Medicine in my Therapeutics. There is as much difference between Physicians who employ only one of these Remedies & one who uses all as the State of the System requires, as - there is between a General who contends with an enemy only with Musketry & one who makes use of as occasion may require, of Musketry, the various kinds of Artilery, Bayonet, Sword, Famine, & Stratagem in his System of warfare.

The next form of Pulmonary Fever is, the

Catarrhal State of Fever. This arises from the Sensible qualities of the Atmosphere, or alternation of heat and Cold produce it; hence Dancing is a frequent cause of it; Sleeping with too thin bedclothes. Wearing thin clothes &c The Throat, Wind pipe & Lungs are principally affected in Catarrh. It is a milder grade of Pneumony, and is to it what common Bilious Fever is to Yellow Fever, or Typhus to Plague.

Tho' it generally proceeds from the sensible qualities of the air, yet it appears in some cases to be Contagious. & when it is Epidemic in the form of Influenza, 'tis the most uni versal disease that affects the System. It pervades not only Whole Cities, but even the Whole Globe. It must in these cases depend on a peculiar State of the Air, favouring its increase; this I am confirmed in from a fact mention ed by Mr. McCauley of the Island of Vuleta, that when ever Strangers arrive there an event, in the course of three days, the Whole Island will be affected with the disease, from the breath of the Strangers probably. The influence of the Breath I have be fore spoken of. The Brahmins being unable to bear that of meat eaters. The Influenza affects Adults only. Indians it is said escape it where it prevails all over the World. It appears in different degrees of morbid action. In some cases, Synocha, Synochoid, Synochela, Typhoid, and some times even as low as Typhus. This Disease is less under the influence of Climate & Season than any other. It proves fa tal in most weakly persons, to Drunkards; where these are not des troyed by it, it often terminates in Pulmonary Consumption. The Cure of this disease must depend on the State of the System; if it is attended with much Morbid Action as Synocha, Synochoid, or Synochela, we must bleed till we reduce it; if the Pulse be still tense, Lenient Purges, Demulcent Drinks, & if a —

Cough be present, & the System reduced to Typhus action, we may employ Opiates, Cordial Diet & Drinks.

We are told the Influenza is always a precursor of the Plague. It is certainly of the Yellow Fever. It prevailed in this City, & all over the United States in the year 1760; the Yellow fever prevailed here in 1762. The Influenza appeared again in '89 in many parts of the United States, & in the year '91 the Yellow fever succeed it in N. York; and in 1792 in Charlestown (S.C.) and in '93 in Phila.a. It appears hence clearly to depend on an inflamatory State of the Atmosphere. Mr. Webster in his History of Epidemics, proves there never has been a great Plague without its being preceded by the Influenza.

The next State of Pulmonary Fever is

Pulmonary Consumption.

This is a prostrated Pneumony, or what I have called Pneumonella. Why not? We have Chronic Jail Fever, as well as Chronic Bilious Fever; as well as Yellow Fever, why not Chronic Pneumony, as well as Acute? For an account of the remote cause of Pulmonary Consumption, I refer you to my Eng. & Obs. and shall only add to what I have there said the following remarks, First, that it is induced by predisposing debility of the whole System, without which no Pulmonary Consumption, can be excited. 2d. It is a disease of the

Bloodvessels. 3d It alternates with Gout, Rheumatism, Mania, Headache, Toothache, Diarrhoea, Eruptions, Dispepsia &c. 4th It prevails mostly in Cold moist Climates. Dr Beddoes says that one fourth who die in Great Britain, die of Pulmonary Consumption. In Salem (Massachusetts) in 1799 there were 166 Deaths, of this number 53 were of Consumption, & 8 of what is here called Lung Fever, which is a State of Consumption: So that one third of the Deaths was of this disease, which is more than in London; and the reason probably is, the prevalence of cold moist Easterly Winds, which blow almost constantly at Salem. It is a common disease from the same cause at Boston & Rhodeisland. Next to G. Britain Ireland & Holland are most remarkable for Consumption in Europe. Dr Beddoes has taken notice of the Professions & Trades most subject to this disease; and he says those Trades are most subject to it, which are of the most Sedentary employment; of the contrary (those not subject to it) are such as have active exercises, as fish women, Sailors, Boatmen, also Butchers & Catgut makers. Linn made Similar observations. It affects Brutes as well as the Human Species. 5th The Period of its duration varies from 6 weeks, to many years; and Instances have occured of its continueing with intervals during the whole of a long Life. When it kills in 6 Weeks, it is called the Galloping Consumption. 6th It rarely affects Children under 6 years old. 7th It is now

and than Contagious. In Portugal Cases of its Contagion have occured; & I have heard several unequivocal proofs of it's being taken by Contagion in Connecticut. 8th. It is said Black Eyed & red haired people are most subject to it, predisposed to Consumption 9th. It is sometimes Hereditary, and is most commonly derived from the Father, as Madness is from the Mother. ——

It Terminates first in Hemorrhage, 2d. In Abscess or Ulcer. 3d. In Tubercles; and lastly in Effusions in the Lungs. I say Terminates, they have been supposed causes of it, but they are effects. The Effusions via Veins are from the Blood vessels into the Bronchia. 'Tis an error that crept into Pathology by mistaking caused for effects, which it belongs to an American Pathology to rectify correct. Thus the water found in the Ventricles of the Brain has been supposed the cause of the Disease. The effusion in the Trachea Viz Croup, has been called the cause of Cynanche; thus too the debility & weakness found in the Muscular Fibres & Arteries, which predispose to Spasm, has been supposed the Cause of disease; Obstruction of Bile also, are the supposed causes of bilious fever. Thus also, the Retirement of Urine & Dirty blood have been supposed the Causes of Disease which Nature throws off. 'Tis Absurd! They are all the effects of Morbid Action; and it belongs to an American System of Medicine to have corrected this erroneous arrangement of Causes & effects in all the

above mentioned Diseases. The Ulcers in the Lungs are as much an effect, as the Water in the Head is, in Hydrocephalus; tho some have erroneously called them Scrophulous tumors. They proceed from effusions of the Bronchia.

Lecture 40th

In the Cure of Pulmonary Consumption, it is of great consequence to attend to the Premonitory Symptoms.

It is always preceded General or Partial Debility. The Premonitory Symptoms are, a slight Fever increased by Exercise; a burning Dryness of the Palms of the hands; Increased flow of Urine; dry Skin, Flushing of the cheeks, or one of them; An acute pain in the breast, in some cases headache; Sick & Faintly fits; a deficiency of Appetite. The Pain in the Breast is sometimes the last Symptoms.

The Remedies here should be gentle Exercise, Cold Bath & Tonics, as Bark & Steel. By the use of these Remedies in this State, I have prevented an hundred cases of Consumptions. We must seize it by the Forelock, for Diseases, like Time, are Bald behind.

Consumption never comes on without these Symptoms preceeding, unless from a Malgened Pleurasy, in which case it is seldom preceeded by them all. After them morbid action takes place in the Lungs; and the Arteries now take on the Pulmonary State of Power, and it is manifested in the Pulse, which is quick, tense, or weak &c. Appearing Sometimes in forms of Synocha; Synocula, Synochoid, Typhus &c.

The Pulmonary Consumption is divided into 3 different Stages, of which I have given an account in my Essays. & obs. — In some cases the Synochoid action comes on first. — In others, the Synochaid or Typhoid. Sometimes the first Stage I have Spoken of comes on first, sometimes the 2d. and in many cases the Typhus, or last Stage of it, which will not bear the loss of a single ounce of blood. The Remedies are of course to be adapted to the State of the System. In Synocha, V. S. may be used to considerable extent, from one to 50 times, and in such quantities as the Pulse Indicates; even after oppression has taken place, bleeding is useful in prolonging life, and now and then effects a cure.

The next remedy is a Milk & Vegetable diet; and a Small portion of Salted meat Should be used; This is a very good remedy, but cannot be long continued, as it

as it induces Dispepsia. Dr Davidson (a late writer) has taken great pains to shew that a solid Diet be preferred to a liquid diet, as it produces far less blood than the latter. An improper dependence, however, has been placed on Diet in this Disease.

2dly Depletion can be used by abstinence from food or by applications to the Stomach; this organ is, however, so insulated, that the Bloodvessels do not appear affected by it.

Bloodletting is the only manner in which we can deplete to advantage in these cases.

3dly Nitre has been used with great advantage in this complaint; it appears to act on the Stomach, & thro its medium, on the Lungs; loosening the Cough, tho' in some cases it has the contrary effect. Dr Cullen used to relate a case in his Lectures, where nitre could not be introduced into the System in any way without increasing the Cough to a great degree. It cannot, however, be used more than 2 or 3 months without inducing Dispepsia.

4thly Blisters to the Arms & Legs, as well as to the Breast are said to be extremely useful.

5thly Demulcent Drinks should be used; such also as excite Perspiration, as Seneca Snake root tea. Flannel should for this purpose be worn next the Skin, and in Summer Muslin, this is very useful.

6th. Exercise in this Stage of the disease, is very hurtful even when moderate; it should therefore be avoided. There has been a dispute among Physicians as to the utility of exercise in Pulmonary Consumption. Dr Mead says Exercise is extremely useful. I accord with him in certain Stages of the Disease, which I shall presently mention; but now, they are very hurtful. Loud Speaking, talking long & Singing should be avoided. But our principle dependence, if the State of the Pulse allows it, should be placed on bloodletting, which mitigates & relieves all the symptoms.

9th. Opiates may be used, they are a necessary evil; — its ill effects as a Stimulus, are compensated by the ease it produces at night to the Cough; the Patient should therefore take an opiate at bed time.

8th. Blisters & issues have been of great use in this State.

II. In the Second or Typhus State of the disease, Exercise may be used where the action is Typhoid; but it is more useful where the action is Typhus; here Tonics & Tonic aliment are to be used. Animal & Vegetable food may both now be used. Grapes have been much extolled in the Typhus State of Consumption. I have seen good effects result from the use of them as an article of Diet/see Articles Cons./ Eggs & Oysters are very agreeable & highly medicinal in this State of the Disease. Tonic Medicines should be

* In this State, Tar, either in Form of Pill or Tarwater, I have found to be of great advantage. Garlick in substance and infusion

also used, as Acids especially the Vitriolic: also Lozenges from the acid they contain; Wine; Bark; Steel; Bitters, Arsenic; Tyme; and above all Opium, should be exhibited. Exercise or horseback should also be used; this is seldom practicable in ~~this stage~~ the third Stage of the disease, but here, it is highly necessary. A Sea Voyage should be recommended; but if neither exercise on horseback nor a Sea voyage can be had; Swinging should be used, or the Chamber horse.

It is here of great consequence to avoid the Cold, damp night air. Flannel should be worn next the Skin and Muslin ~~next the Skin~~ in Summer; and Women should be advised to wear drawers, to keep up an equable perspiration. The Cold Bath I have known of much service in this Stage of the disease; and I think Sir John Floyer relates Several cases which have been cured by it.

It is of great consequence to avoid the air at the Sea Shore in this Disease. If this be true, why recommend a Sea Voyage? I answer, the air at the Sea Shore is a mixture of Land and Sea air; whereas the air further out at Sea is pure, & the motion of the Ship tends to dissipate its effects.

A Salivation should be excited whenever it is

practicable. Dr Bond used Mercury 20 years ago to produce this effect, which he could not succeed in. I have attempted it in many cases, but never hardly could succeed. In one case however at the Hospital you have seen a Patients mouth made sore, in consequence of which he was suddenly relieved of all his Symptoms, & is now discharged. ——— It is of consequence Gentlemen in this disease, to have our Patients entirely under our government. I have lost 3 Patients from their not submitting to my advice when they were nearly well. Three cases mentioned, all of which were Ladies; one of which by laughing ruptured a bloodvessel, & soon died. Miss Maltby by eating & the 3rd by talking to an acquaintance from an hour in the cold from her Carriage.

Many means have been devised to check the cough in this complaint; a variety of Lozenges have been used, I know of none superior for this purpose, to the Liquorice Julep, composed of ʒij Liquorice dissolved in ʒii of water & 6 gtts Laudanum; a table spoonful a dose; if necessary Antim. Wine may be added. The cough should not be neglected.

After having in vain tried the Prot Azote & the different Gases as Remedies for this Disease, Dr Beddoes again comes forward with another Remedy for it, Foxglove. I congratulate the World on the discovery of this, and

triumphs in the Poisonous weed after its use was recommended by Dr Withering. I tried it in several cases with out effect; I heard of one case in which it was said to have been useful; but I am disposed to ascribe it to the Bark & some other remedies which were used in Tonics. I would as soon believe that Hellebore is a Deluterie for Mania, or Valerian for Epilepsy, as that this poisonous weed is useful in Consumption.

In this disease there frequently occurs a deposition in the Trachea of a Serous nature, called by Dr Bedeloes a Bronchial Gleet; It might with more propriety be called a Tracheal Gleet, as it only occurs in the Windpipe. Tonics should be given to cure it; Bark wine, Steel, Ether, Sweet Apples, & Fumigation of Resin.

The next in order is the

Anginose State of Fever. This includes

the Cynanche Parotidea, the Cynanche Maligna, the Cynanche Scarlatina &c. &c. All these names have been given according as the different parts of the throat are affected differently with the Disease. In some cases the Trachea is obstructed, & Respiration is of course difficult.

Deplation should be used as the remedy. A. S. Purges Blisters, & Fumigations are used.

Cynanche Maligna. This has been called a Putrid Fever; 'tis false; there is no putrefaction in it. It is a disease of violent morbid action; it is a violent Inflammation of the Trachea. I have compared it to a Soap-bubble, which lasts a short time and then discharges it self, & terminates in the Gangrene now Stock in a few days, nay sometimes in a few hours. All the symtoms are such as indicate great & violent morbid action. I have never seen it Epidemic but once, in the year 1763 & 4, it very fatal among Children.

The Remedies for it are, Bonnets, Gentle Purges, Bark, wine & fumigations of Mirrh & Vinegar to the throat Salvation should be attempted, but there are cases in which Bloodletting should be used: Wherever we are called early this remedy should be used, & here it seldom fails of curing the disease. I recollect hearing my Preceptor lament the Death of a Servant man under his care, from the Prejudice of his friends forbidding bleeding in a putrid fever 1763 & 4, because Dr Fothergill forbade it. It appears to require the Inflammatory constitution of the Atmosphere to render it Epidemic. When I am called early in the Disease I bleed copiously freely. Mrs Barnet I bled 4 times with Cynanche Maligna, in the course of a few hours with

great Success. In what manner does the Bark act in this formidable Disease? I answer by overcoming the indirect debility, induced in the System by the disease. But why does it not cut so one cure Yellow fever? I answer, because the Stimuli of the disease are much weaker than in Yellow fever: And also, because in Yellow fever, there is much more Congestion in parts essential to life than in Cynanche. The latter is what the French terme a Centrefugal disease; hence the Eruption on the skin which occurs in it. Whatever Dr Fothergills advice & opinion may be, I am persuaded that depletion, & especially Bloodletting, is prosper in the early Stage of the disease, as in the other States of Cynanche. For the Minutiae of this I refer you to Authors.

Scarlatina. In this is less morbid action than in the Malignæ. Authors have supposed them to proceed from different Specific Contagions. This Circumstance, it is of no consequence to determine, if the State of the System must be attended to.

The Remedies are first Bloodletting; but Morbid action is sometimes so feeble as to be cured without bleeding; but since the prevalence of the Inflamatory Constitution of the air, I seldom find it cured without Bloodletting. Vomits should be used,

they are extremely useful in this disease: Where Bile is present in the Stomach, as is frequently the case, this ought to be always attended to; hence it is common both in this & in Cynanche Maligna, to commence with Vomiting. It acts by depletion and promotes very powerfully the discharge by perspiration. They should be exhibited 2 or 3 times a day. Withering used this practice with success. 'Tis a more Inflammatory disease than the Maligna, as in this, the morbid action transcends Inflammation. Fumigations of Worm & Vinegar, are useful in the Scarlatina. Lastly Mercury in such doses as to excite Salivation should be administered; this is equally prosperous here as in the Maligna. Dr Ogden of Long Island says he hardly ever saw a case of Death from either States, when the mercury operated to this extent Mercury should be of course used in our purges; and also given in small doses to excite the new action. Molasses is the best Vehicle of it.

Cynanche Trachealis. Many diseases have been perpetuated by destroying the lives of Great Men. The Intermittent Fever destroyed James the First. The Colic Killed Mr Locke. The Stone D. Franklin & Sir Isaca Newton. So the Cynanche Trachealis will in future be remembered as having destroyed the life of the Great General Washington.

Cynanche Trachealis arises from cold & from Contagion but it occurs, moreover, in small Pox, Measles & some other diseases, & I have seen it alternate with Rheumatism. Here it is said to be Sympatomatic; but it is merely a translation of morbid action to the Throat. In Dr Faulk the Rheumatism was translated & appeared in form of Cynanche Trachealis. 'Tis the same Disease exactly, Morbid action still. Cold is the most common remote cause of the disease, & Children are the most predisposed subject to it. I have seen Aphtha . . .

. . . . . It affects Children in the same manner as it does Adults. It is sometimes Epidemic; it was so the year Gen. Washington died; the Inhabitants of Alexandria had it among them.

I have divided this disease into Spasmodical & Humoral. In the Spasmodical, the Membrane which is formed in the Trachea, is the effect of common Inflamatory action. I formerly supposed it to be Mucus thickened & Indurated, but I now believe it to be an effect of Inflamation, & to be formed in the same manner as the effusions in the Intestines from inflamation. The Humoral is a disease of the Arterial System, in which there is an effusion of Mucus only, called by Dr Frank Trachealis, to put it on a level with the Inflamation of the Viscera. It is sometimes periodical, & commonly attacks in the Night. Here a Membrane is not formed, as the In Morbid

action transcends the Inflammatory action.' Tis as much the effect of the Disease, as water in the Brain is of Hydrocephalus tho' some have attempted to establish that it was the Proximate cause; but the Membrane is not always present. Dr Dick of Alexandria deserted 6 Patients who died of it; & in none was there a membrane, nor a mark of Inflamation; or at most a blush of it on the Glottis, Epiglottis or Trachea.

The disease may be considered as a Pneumonia of the Trachea; and its Proximate Cause in both the same, & not the membrane. Dr M.Clives (or some such name) has written a learned & ingenious Treatise to prove it is the Proximate cause of the Disease, and he calls it from that circumstance Cynanche Toxicosa. It was supposed to be a Spasmodic disease; so it is, but Spasm is only one of the forms of Morbid excitement; there are 5 others, in some of which this disease appears.

The Remedies are V.S. This should be used copiously. I bled a Child of Mr Carrell 4 years old 3 times in this one day with this Disease. Dr Physic informed me he bled a Child but 3 months old, 3 times in one day, & gave it half a dram of Calomel & cured it. Emetics should be given in this disease. Tart. Emetic answers best; they should be repeated frequently till the Patient recovers. 3rd Purges always of Calomel. Calomel should also be given in small doses, so as to produce the new action of Salivation. 4th Stimulating Cataplasms should be applied

to the Part, to produce revulsion. 5th Blisters to the neck, & bleeding there should be used. The Pediluvium may be used with advantage. Dr Archer, a respectable character has given much weight to a remedy be used in this Disease, the Seneca Snake Root. I have frequently used it but without much success. I consider relying on any of these remedies exclusively, as depending in Battle on the Sword alone where we ought to employ all the implements of war. It is remarkable that Bloodletting has been opposed always in this disease from a false theory of the disease. Thus Dr Boerhaaves Theory rendered bleeding improper, as it prevented Nature from Concocting the Morbific matter. Dr Cullens's Theory of Putrefaction rendered it improper, as bleeding would tend to relax the Solids & assist the proces. Dr Browns Theory of Debility rendered it improper, as it would assist the disease by weakening still more. Now Gentlemen you see the propriety of Bloodletting as will be equally useful when ever ~~B~~ Inflammation exists. But recollect you are to be guided by the State of the System, according as the disease appears in any of the 6 forms of Morbid excitement as before enumerated. Spasm, Preternatural heat, Itching, Suffocated Excitement &c.

Lecture 50th

The next is the Rheumatic State of Fever. Great Pains have been taken to distinguish Gout from Rheumatism, by many diagnostic marks; but their Proximate & Remote causes are the same.

The Remote causes of Rheumatism are ~~the~~ great fatigue, & alternate heat & Cold; & hence we find Sailors & Soldiers much affected with it. Horace long ago observed it in Sailors, they bring on the predisposing debility. - The Exciting Cause in Gout is Intemperance in Eating & Drinking. Intemperate use of Tea; Immoderate exercise of the Understanding & Passions; hence the exciting causes of Rheumatism are often the same. Gout & Rheumatism are therefore, merely different grades of the same disease. They bear the same relation to each other, & are as much one Unit as the common Bilious & the Yellow Fever. The seat of the Rheumatism, it is true, .. in the Joints; it is a more Centrifugal form of Disease; but in Yellow Fever now & then, the same thing happens; hence the Brake bone Fever, when

it occurs in the Limbs. In the Gout there is more Predisposing Debility.

Rheumatisms is either Acute or Chronic; both consist in Morbid excitement; but as the seat is in the Ligaments principally, there is no Inflammation, for the Serous vessels in these parts, refuse to admit the blood, & this I conceive to be essential to Inflammation. This when it occurs in disease, is merely the effect of wrong action, & is by no means essential to Disease; it has hitherto been spoken of in too limited a Sense. Let us then this term since that of Morbid action is so much more applicable. Like the lately discovered Source of the Nile, Whence proceeds the Inspetuous Cataract, calculated to spread Terror & Destruction around an extensive Country, so Morbid Excitement is the Source, whence proceeds the Inflamation, the Obstruction, the Effusion of Water, Gangrene & Death.

In the first or acute Stage of Rheumatism, the Pulse is generally Synocha. In the Chronic, commonly Synocula, equally tense, but more contracted in Column.

The Remedies for Acute Rheumatism are, 1st. Bloodletting, both local & general; this, if used in the beginning prevents the effusions, constituting the watery swellings of the Joints resembling Anasarca. It is remarkable that B. L. in this Disease where there is no pain, will, in some cases,

excite pain, which must be relieved by subsequent bleeding.
2dly Purges, are very proper in this Stage of the Disease. The
Neutral Salts should also be prescribed, especially the nitrous
-mercurial Powder, composed of Nitre, Calomel & Emet. Tartar.
3dly Blisters should be applied to the part affected. This Gentle
-men, is following Nature; She will oppose Disease if left to
her self; We, by employing Blisters relieve Her of the necessi-
ty for this. 4th Cold air should be employed & Sweats.
After the Action has been reduced by these means, Dovers
Powders may be prescribed with great advantage. You
know its composition, Opium, Vitriolated Tartar & Ipe-
cacuanha. Mercury is to be used so as to excite a Saliva-
tion. I formerly took notice of Capt. Cooks remedy, Frictions.
then must be powerful, & are then useful. What effects
would Cold water & Ice have in this Disease? I never have
tryed them. The Founder of Horses, which is a true acute
Rheumatism, is cured frequently by keeping them in a
Marsh, or cold water, for 12 hours. When these fail, recours
may be had to the application of Cobegs Leaves to the
Limb, & anointing it with Molasses, & more especially
with Mercurial Ointment. All these are gently Stimulent
and ought to be used. They produce Ardor & Mador.

Rheumaticula, or the Chronic State of Rheuma-
tism, is a fever of the Inflamatory kind. The Pulse is usually tense, tho'

small. Bleeding should be used and all the remedies prescribed for the Acute Rheumatism. Bleeding is however, here to be used more as an Alterative, than to deplete; it must not be used in large quantities, 6, 8 or 10 ounces taken & repeated

When this is imperfectly cured, what Dr Cullen calls Rheumatalgia, occurs; this is merely a pain & weakness in the limbs without fever. The Remedies for it are Stimulants, as the Warm & Cold Baths (externally) The Volatile Tinct. of Guiacum, which does no good in Rheumatic cases, but may be here used with advantage; Sassafras berry Tea — Camphor, & an infusion of Poke Berries; Issues, Blisters, Electricity, are all proper, also a Salivation. In some cases a Suppuration takes place, called by Dr Cullen Arthroposis. This is seldom cured; and is sometimes accompanied with a dislocation of the Joints.

I shall now proceed to make a few observations on Gout, from my Publications (Vid. Rush's 4. Vol.) The only addition of considerable consequence, which I observed exclusive of the Dr's Publications, is a Case in which the Coffee coulored, or black vomit, supposed to occur only in Yellow Fever, was discharged from the Stomach in a severe fit of the Gout, mentioned to prove the Unity of this with other Fever.

I'll pass on to the Phrenitic State of Fever. This

is an interesting disease. The Brain which is the seat of it is an important Viscus. It is deranged in this disease as well as in Hydrocephalus, Paralysis, Apoplexy &c. It consists in Morbid excitement in that part of the Brain which is the seat of the Mind; hence, all its faculties are deranged In Phrenetis there is always Delirium. In Mania the the whole Mind is affected. In Hydrocephalus, that part of the Brain, principally, which is situated near the Ventricles. While in Paralasis, half of the Brain is diseased, & that part of it which is the seat of Voluntary. And in Apoplexy the whole Brain is diseased, & Morbid action appears in form of Suppressed Excitement. A thin Partition only divides them, the Proximate cause being an Unit.

The Exciting causes are first, such as act directly, as Inflamation, the exercise of the Passions & understanding but above all Contusion. Here the Contusions need not be on the Head; Contusions on the Feet, generally produce the effect. And the time of reception of the disease from the time of the accident, varies from one to six weeks. It sometimes occurs from a translation of Morbid Excitement from other parts of the Body to the Brain. This occurs in Small Pox, Pleurisies, Yellow Fever, & some other diseases; here it is commonly said to be Sympatomatic

and is called Asthenia. Even in Typhoid & Typhus action, Paroxisms now & then occurs. The Pulse in Phrenitis is often Natural. Mr John Hunter has observed very justly that in Diseases of the Brain, the Pulse affords no certain Indication of the State of the System. This must be acquired from the State of the Symptoms Our Remedies must still be regulated by the State of the System: Where there appears much morbid action, Copious V. S. must be used; this is more or less necessary in the Case of Contusion. Mr Celine drew from a Patient in St. Thomas's Hospital, ill of this disease from Contusion 16 ℥ of blood every day till he was cured. Cupping & Arteriotomy, might probably here be used with advantage. 2dly Purges & active Glysters. 3dly Blisters to the head & back of the Neck. The head should be immediately relieved of the Hair which obstructs perspiration, & is a Stimulus; all Stimulus should be abstracted. Cold water & Ice applied to the head. Silence & Darkness; a very low diet should be enjoined, where it even occurs in Typhoid or Typhus Fever.

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Lecture 51st.

We proceed with the Apoplectic, Lethargic, Paralytic and Hydrocephalic States of Fever

Apoplectic State of Fever. This proceeds in some cases from the same ~~xxxxxxx~~ as Remote causes as the Yellow Fever and Plague. Some persons suddenly die with Apoplexy, from the excessive force of the Miasmata of the Plague & Yellow Fever suddenly destroying the excitement of the Brain. Apoplexy, sometimes appears as an Intermittent in form of a Tertian recurring every other day.

The Proximate cause is Morbid action in the Vessels of the Brain.

Remedies for Apoplexy, are copious Bloodletting. It should be carried here to great extent, and should be local by Cupping as well as General. Purges ought to be prescribed as well as Clysters. Blisters should be applied to the head and neck ~~and~~ Cataplasms to the feet: and a . . . . Salivation. When Apoplexy appears in an Intermittent form, Bleeding with Blisters have been used. ~~A~~ Good effect will result from prescribing the Bark.

Paralytic State of Fever, Is less common than the

Apoplectic; but does ~~not~~ proceed from the same Causes. It occured in the Yellow Fever of 1793 in Several Cases, & Sometimes in form of a Paraplegia, where the Inferior Extremities were immoveable, & where the Kidneys refused to Secrete Urine.

The Remedies for Palalegia, are. Copious Bloodletting, Local & General; Blisters; Mercury so as to excite Salivation and all the Remedies used in Fever in General. They must all be accommodated to the State of the ~~Arteries~~ Pulse. Where the Urine is not discharged, it Should be drawn off with a Catheter. The Salivation Should be principally depended upon in Chronic Palsy; here it Should be used 2 or 3 successive times.

The above two States of Fever are alike related to the Nervous & Arterial Systems.

Lethargic State of Fever. This is merely a weaker grade of Apoplexy. It occurs in many Diseases and is called Coma. It is Cured by Smaller quantities of the Same Remedies as for Apoplexy & Palsy.

Hydrocephalic State of Fever. This Disease appears most commonly in Children, from causes which I have before enumerated. It does sometimes occur in Adults, from Chronic headache &. a variety of other complaints which

one in Hydrocephalus. It frequently comes on in consequence of Contusions & Blows at all Ages. It is still more common by a Symptom of General Fever, & hence occurs most frequent by in Epidemics, when it often assumes the form of an Intermittent. It now & then occurs from the Suppression of an habitual discharge from the Skin or other Excretory; and now & then is a consequence of Pulmonary Consumption & Diarrhoea: This is merely a Translation of Morbid excitement from the Lungs & Bowels to the Head Brain.

That the water is the Effect of the Morbid action in the vessels of the Brain, I infer, 1st. From the causes which produce it being the same as produce Morbid action in other parts. 2d. From the Symptoms attending it; a hard quick & Slow Pulse; and from Pain 3d. I infer it from Inflamation now & then to be found in the Brain after death; which Inflammation is an effect of morbid action This Inflamation I found in 5 of 8 cases which I dissected after Death from this disease. In the other cases, the want of inflamation was owing to the Morbid action being so violent as to Transcend Inflamation; or else it may be attributed to the vessels unloading themselves by effusion of Water. 4th. I infer it from a Membrane being formed in Hydrocephalus, or in Inflamation of the Pleura, or in Cynanche Trachealis. For a Case of this Kind I refer to my Med. Obser. V.

2d.

mentioned to me by Dr Cox when when in London. This Remarkable case amounts to a Demonstration that Morbid Action is the Proximate cause of the Hydrocephalic State of fever. In consequence of this Morbid action, there now & then occurs Inflamation, but in the greater number of cases, the vessels relieve themselves by effusion. And I hope hereafter to prove that the Effusion in Cerebro, Anasarca, &c. as well as in Hydrocephalus, is the effect of Morbid action; as also the formation of Membranes & Analagous Phenomena. For a History of the Disease, I beg leave to read an Extract from Dr Quins on this Subject. (Dr Rush read which took up some considerable time) In this History of Dr Quins, I find some Symtoms always mentioned by Authors, but which by no means always occur; of these, the Strabismus or Squinting is not universal, nor is the dilated pupil, nor the Jerking nor the Pain. Patients frequently die of this disease without the occurrence of Pain, or, in Short without any of the Diagnostic Marks of the Disease which have been heretofore so much relied on.

Children are subject to this disease at a very early period. I have known it in Children not 6 weeks old, proceed from Cholic Inflamation. Of Pain in the Breast, & sickness at the Stomach, are perhaps, as invariable Symtoms of the Hydrocephalus, as can be relied on. Dr Wistar informed me.

that he saw a case of Hydrocephalus in a Child where it proceeded from a Catarrh, & where there was no pain. Dr Cannon informed me he attended a Child in this Disease, where there was no dilatation of the pupil. Dr. . . . send a Case prove petet where 3xii of water were found in the Ventricles of the Brain, without any dilation of the Pupil or Squinting occuring.

That the Hydrocephalus is an inflamatory State of Brain is infered from the remedies which Cure it; In the first place copious Bloodletting: the good effects of this remedy have been experienced by hundreds in this City, where the practice is now generally adopted. Before I was in the habit of using bloodletting I used to lose 20 of 30 Patients; but since I have used this remedy, I have lost none where I have been called early in the Disease, & had uncontrolled government over my Patients: And I have cured several Patients in the 2d Stage of the disease, after Convulsions had come on, & after water was probably effused. I am visiting now, a young Lady from whom I took 100 3 of blood at 10 bleedings, & who is now recovering. In bleeding here, we must not be governed entirely by the Pulse, but go beyond what it directs, & bleed for the smallest degree of Tension, for in the Brain there is no outlet as in the Lungs & bowels. Effusions here are fatal & are lodged in the Ventricles of the Brain.

The 2d Remedy is Purges, there should be frequently

used & alway contain Calomel. 3d. Blisters are to be applied to the Neck & head, & should be used after bleeding. So as to act as a counter stimulus to the Disease. 4th. Cold Water & Ice should be applied to the head. Salivation should be excited. When the Disease is in form of an Intermittent Bark may be used with advantage. The Cold Bath should be also used especially after Morbid action is destroyed to prevent relapse; for when the Brain has been once weakened by this disease it is readily reproduced.

This disease Gentlemen, is still considered an incurable one in G. Britain & other parts of Europe. Dr Morse a very little while since, declared that he had never seen it cured in his life. Dr Lettsome wrote to me a short time since, informing me that he had read my publication on the subject, & had tried the use of bloodletting without advantage. I believe him; but he used it, as they do in all diseases in Europe very sparingly, & not in sufficient quantity to cure the Disease.

The bleeding I again add, should be large and frequently repeated. To the Lancet, Gentlemen, That Magnum Dei Donum, as Dr Mead titles Opium. To the Lancet I say belongs the erection of a Victory over this Incurable Disease. Since the practice has been introduced into common use, We have obviated one great

Reproach to the Healing Art. And we have dried up and prevented Rivers of Tears from the Eyes of our fellow Creatures. Since the adoption of this Remedy, I am warranted in saying that not more than one or two Deaths occur in a Year in this City from Hydrocephalus.

I shall next proceed to treat of Nephritis, but as the time is advanced, I defer it till our next Lecture.

Lecture 5th

Nephritic State of Fever.

This State of Fever is frequently induced by Calculi, & occurs in Gout & small Pox, & also in the Malignant State of Fever. Where it occurs in Yellow Fever, it depends on an Engorgement or Soaking of the Kidneys, in consequence of which Secretion of Urine is obstructed. It may be known by a gnawing pain in the Region of the Kidneys, Sickness at the Stomach, & Vomiting, Pain & uneasiness in one thigh & Leg; high colored Scanty & Muddy Urine; and, in Men, the Retraction of one of the Testicles

Diabetes. I have long wished for a satisfactory

Theory of the production of this disease, I have thought much much on the subject, but have been at length forced to retract to the Acrity of Bacon, for the Explanation. A Theory I have broached since that time, has been supported by the success attending practice founded on this Theory.

Diabetes has hither to been considered as a specific disease of the Kidneys; but many of the Symptoms evince to prove it to be a Fever. I shall Simply mention a few of the Symptoms. They are a quick full tense Pulse; Great heat & dryness of the Skin; a flushed Countenance, great thirst, and pain in the Loins.

Its causes afford additional proofs of its being a Fever. The Remote Causes are the same as precede those to Fevers generally, Viz: Such as debilitate, Cold, fatigue, acid drinks, and in general such as produce debility in general either direct or indirect, or excess in Eating and drinking, Water in excess debilitates by distention (indirectly) Medicines acting as Sedatives, Sudden transitions from Cold to heat &c. and lastly, by debilitating Vapours of the Mines.

In Diabetes there is a frequent discharge of sweetish watery Urine, which is greater in quantity than the water drank by the Patient. It has long been supposed that this additional quantity is absorbed from the Atmosphere by the Surface of the body. The Urine contains much Sugar. In one case 9 ℥ of Sugar were obtained from .. .. of Urine, and in another an ounce.

The Urine is of course less perfectly secreted owing to an engorgement of the Kidneys; hence too, in some cases arises the sour smell of the Urine indicative of this disease.

That this disease is a Bilious fever I infer from the colour of the Eyes. Costiveness from the absence of bile in the Stools. And lastly the Stomach shews marks of disease in diabetes, by a morbid appetite, by a vomiting of sweetish & acid liquors from it: but further, the System shews marks of General morbid action or fever in Diabetes; by a preternatural discharge of Sweat & Saliva; the quantity & quality of which are altered by morbid action & possess sweetish taste. This is analogous to the change of Glandular Secretions by morbid action, for example morbid action of the liver gives us green, black & acrid Bile. morbid action in the Salivary Glands (from what ever cause) gives us an abundance of watery Saliva. Morbid action in the bowels, gives us thin watery & inodorous Stools. But these changes are not confined to the glands. The Lungs, the Stomach are also affected. The acid Sweats appear to arise from the first grade of morbid action, when the Sugar, which composes the great & most Nourishing part of our diet, is changed by the acetous Fermentation . . . . . .

. . . . . .

. . . . . completed animalization.

By some mysterious Law of the animal Constitution, we find Morbid action disposed to terminate in oppression. When situated in the joints, the oppression by which the nerves are relieved, is Chalk or Calculous matter; When in the soft parts, pus is effused or secreted; When bones are injured bony matter is secreted; & I can readily conceive that morbid action in the Kidneys may be terminated by oppression or secretion of Saccharine matter. It is of much less consequence to Know the nature of the process, than the degree of morbid action necessary to produce the change in the secretion. We judge of this principally by the degree of Fever, or indicated by the Pulse. This is quick, tense & full in Diabetes; also from pain in different parts of the body. These and the appearances above spoken of, give us good reason to suppose conclude that Diabetes is a Bilious Fever of great Morbid Excitement. And this Theory is further proved by the Remedies proving Successful by which we treat Bilious Fever.

These remedies are in the first place, Bloodletting: the blood here is dizzy, covered sometimes with a buffy coat, but the Morbid appearances of the blood varies; in some cases the morbid action is so great as to produce the dissolved blood; Where the

disease becomes Chronic & is not attended with much action, bloodletting should be prescribed or an alterative but it should be in small quantity & frequently repeated. The blood it is said in these cases is less pestiferous, than in other diseases. I cannot speak of the success of the Remedies from my owne experience, having never seen but Cases of the disease, and these in an advanced Stage of it. One I saw in the beginning, but was not permitted to use any remedy to sufficient extent. After bloodletting has been used frequently & copiously, Emetics & Purges may be administered, & Low diet strictly adhered to after By these means the Pulse is reduced. Tonics are to be had recourse to as Alum & Whey, Bark & Steel, Opium in large doses, Mercury. Nitric acid has been strongly recommended by by D^r Scott in the East Indies, Also an Animal diet, Cold Bathing; Constant but moderate exercise. In Scotland Fish oil is used by the Inhabitants for Diabetes. It is common to administer Astringents to check the discharge by obstructing the Pores, & preventing the absorption of water from the Atmosphere; but I am disposed to think from experiments of D^r Seguin & Rotherford, which have been repeated with similar results by D^r Rousseau, that absorption only takes place by the Lungs: The oil then I believe, when actually

* This is an imperfect copy.

Reducing Morbid action, as I formerly mentioned, it Possess-ed a kind of Sedative power

Take notice Gentlemen, in prescribing Tonics, that there is a great difference in prescribing them in Chronic Cases in which the excitability is worn away, & in that state in-duced by bloodletting; the former State (where Tonics may not be given) may be known by a pulsation in the Ears, ~~Eyes~~ I have said that I did not think we required any considerable addition to the Materia Medica. I believe it Still, & think that as good Language consists in proper words in the proper places, so the Cure of Diseases & the perfection of Medicines depends on a knowledge how to pre-scribe proper Medicines in proper time & place.

Such of you as wish a particular account of this Dis-ease, may consult the different practical writers, more especially D. Hume, Rabb, & Hope.

When the opinion of the Unity of Disease shall have become more common, this Disease, I am per-suaded, will be considered as a form of Gout; & when the Idea of the Simplicity of Medicine is Still more extended, Gout will be considered as a form of Fever. & when our Science arrives to that degree of perfection foretold in Scripture, every form of Fever to which the human frame is liable will be swallowed up in the Single name of Disease.

The Dyscrasic State of Fever.

I have said that Morbid action in any part of the body if left to itself, tends to effusion; these effusions are of different kinds in different parts to which morbid action is determined. They are, 1st Air, this we see takes place in the Bowels in Bilious fever. I expect also that air is sometimes effused into the cavities of the joints; & Mr John Hunter relates a case where effusion of air took place in the Uterus. 2d Halitus or Vapour, this happens in Hysteria, Generally is most perceptible in the Morning especially in the Eyelids. 3d Serum in the simple state, this occurs in Hydrocephalus & now & then in Dropsy, but in Hydrocephalus, the water effused never coagulates, where as in other dropsies, it generally does, and of course contains a portion of coagulating Lymph. 4th Serum combined with a portion of coagulating lymph; this constitutes the fluid effused in dropsies, as in Hydrothorax & Hydrocardia. 5th Coagulating Lymph, this most frequently takes place in the Kidneys, Lungs, Joints, Gall bladder, Spleen, Mesentery. and it is probable the same effusion takes place in Nucleus of Calculi. 6th Red Globules; this is now & then effused into the Kidneys, & in some Contagious diseases forming Petechiae. 7th Of Serum, Coagulating Lymph & Red Globules; this occurs in some diseases from the speck

force of the exciting cause, which weakens the part afterwards & thus produces Coagulation or Engorgement; the parts being so oppressed as not to react, or if they do act it is irregularly. Where this is resolved by depletion, we have Inflamation, & where it is not Gangrene. Here we see Dr Cullens Definition of Inflamation is wrong; he makes it to consist in increased action, but in this case we produce it by Lessening action. Had he said, in Inflamation there is an Increase of Excitement, he would have been right. In many cases we find Excitement going beyond action. 8th. We find an effusion of Bone from the ends of fractured bones (their reapes) this also is an effect of violent morbid action. Haller & Mr Hunter have considered this as Secretion.

Of these, the effusion of Serum occurs, perhaps most commonly; it follows the Scarlatina, Quinsey Fever, Rheumatism, & Intermittents. Ill cured Intermittents often terminate in effusions, especially in the Limbs, forming Anasarca. Where the water is effused into the Cavity of the Abdomen, it constitutes Ascites. Neglected Catarrhs, & ill cured Pneumonies, are very apt to terminate in Hydrothorax; While Remittent Bilious Fever, tend more commonly to effusion in the Brain forming Hydrocephalus. I do not say that all cases of Dropsy are Arterial Disease; perhaps 1 in 20 may be

disease of the Absorbents; but I am convinced that 19 of 20 cases
dropsy are Arterial diseases. They do rarely occur from ruptured Lym-
phatics. It proceeds as much from Morbid action as Serrous or
Gangrene. We seldom see dropsical Swellings occur from
Debility simply; were this the case, we should find it occur —
mostly in Old Men, yet how seldom do we find them affec-
ted with Dropsy? May how seldom even with Swellings of
their feet, tho' they spend whole years in the Chimney Corner
in an arm chair; Again how seldom do we find persons
affected with dropsy recovering from Sy[illegible], affected with
Dropsy? It is un known after any disease in which eva-
cuation have been used to Sufficient extent. It was formerly
an objection to the use of the Lancet in Yellow Fever that
it would produce Dropsy. 3d. We seldom find it occur af-
ter Pulmonary consumption. 4th. Or after Marasmus or
Atrophy. 5th. We never see Dropsy in persons who die of —
Inanition from Famine, where there must be the greatest
degree of direct debility. Death never occurs from this
cause until Morbid action takes place. Lastly, I
have never heard of a single instance of Dropsy from the
most Copious blood letting used for the cure of Inflam
itory diseases, nor where blood in the largest quantity
has been lost by Hemorrhage from accident. The above
Facts tend to prove to a Demonstration, that Dropsy is

never produced by Direct Debility; but that it is always an effect of Morbid Action; at least 19 Cases of 20. I am willing to allow that one case in 20 arises from Ruptured Lymphatics.

From what has been said, Dropsies will naturally divide themselves in to two Kinds, Such as are of Moderate & Such as are of Violent Morbid Action; he will be able to determine the degree of action by the Pulse; this has been too much neglected in the beginning of Dropsies. It proposes preternatural Hotness, fullness, or Intermission, & in general almost as great a Variety of Pulses as occurs in other Fevers.

The Remedies for Dropsy are the same as for drop by Morbid Action in the blood vessels: They consist, first of Such as are proper for overcoming moderate action by their Stimulent power; and 2dly. Such as reduce it by abstracting Stimulus, as Bloodletting, Purging, Vomits, Diuretics, Diaphoretics &c. For a more particular account of the Symptoms & cure of Dropsies, I refer to my 2d. Vol. of Eng. Edn. And shall only observe here that Success almost universally attends my practice in recent Cases, where I bled copiously in the commencement; and even in Chronic cases, I am more successful than formerly, as I am more regulated by the Pulse, & prescribe for the State

of the System. I am not the first who used Bloodletting in Dropsies; 'tis the Revival only of an old Remedy. Botallus used it above 100 years ago in France, and I have only revived his practice.

Lecture 53d

Continuation of the Physical State of Fever.

I shall add a few remarks on Dropsies as they differ with respect to the seat of the effused water.

The Dropsy of the Brain has been absorbed by means of a Salivation. Dropsy of the Breast has been cured by bloodletting & Mercury; Digitalis has also been used with success in some cases. For an account of the Symptoms of Hydrothorax, I refer you to Dr Cullen who has accurately described them. . . . . has been cured in many cases by repeated occasional small bleedings, Squills, Mercury, & Digitalis. Dr Physick cured a Patient of it by 4 or 5 bleedings. The Squills are often given in form of Oxymel of Squills; the Oxymel of Cornicum has been alternated with Squills with great advantage.

Dropsy of the Belly (Ascites) has been cured by

a Salivation; digitalis here does no good; Where Ascites is
is of long standing, Tapping does no good, but hastens Death
I have known a Case in which half the water was drawn
off at once, & the remainder intended to be taken away
in 10 days, but in that period the remainder was com-
pletely absorbed & the Patient Cured. Mr John Hunter
properly observes that Death is hastened by Tapping in old
cases of Ascites, where the stimulus of distention appears to be
necessary for the Patients existence; the Water being drawn off
the Patient of course dies. I have seen more than discharged
from the Abdomen of Patients labouring under Chronic Ascites
a green water, & a Milky fluid; the latter was 24 hours
in discharging it self. In 2 cases I have known Death
to follow a Tapping of water from the orifice of the Tapping.

Besides the general Remedies for Dropsy, in cases
where the following should be used, 1st A recumbent posture
frictions in the Morning & only upwards for obvious reasons
Blisters are very useful in Anasarca. I have never
known a Mortification in consequence of them. A
dread of this kept me a long time from using them.
Punctures are extremely useful; I say punctures, for
scarifications are not, they frequently terminate in Mor-
tification, but I have never known this to happen from
punctures, & I have known a Gallon of water discharged by

a puncture in the Leg in Anasarca.

Hydrocele. There are 4 methods in curing, 1st by a Puncture in the Tunica Vaginalis; 2d By Incision, 3d By Caustic, 4th By Puncture into the Sac to discharge the Water, & Injection of Wine to ~~discharge the water~~ produce Inflamation. The last mode is preferable for its Simplicity & certainty; and the first seldom cures Radically.

The next in order, is the

Eruptive States of Fever.

These are the Small Pox, Measles, Chick=en Pox, Scarlatina and a few others not worth mentioning & the Erisipelas.

The Small Pox I have treated of in my 2d Vol. of Med. Engs. & Observations, to which I refer you. The Remedies for it should always be accomodated to the State of the System. The Malegnant Small Pox is obviated by copious Bloodletting, & afterwards Mercury in such quantity as to Salivate, in order to prevent the determination to the Brain & Lungs; this Disease is however, seldom now Malignant. The practice of Inoculation has become so universal, that the Small Pox seldom puts on a Malignant forme. On this Subject I refer you to Hillary who has wrote very ingeniously on it, and also to Huxham.

For my observations on Inoculation, see my 2d. Bal. I shall only here notice a few . . . which occur. They will be useful as they will tend to shew how improper are the Limitations prescribed by Books to Diseases. 1st. There is a difference as to time when the Eruptive Fever appears. I have known it from the 5th to the 9th and to the 20th day. When the Eruption occurs on the 5th day it is highly Malignant, & generally terminates fatally when the disease is taken in the Natural way. In Inoculation it comes on from the 8th to the 14th days. — 2d. The Eruption sometimes occurs, when the Disease has been taken the Natural way, on the 1st, 2d. 3d. 4th & 5 days of the Fever. The sooner it occurs, the more Malignant is the case. Sometimes the Small Pox affects the Nose extensively, & sometimes it destroys Life without any Eruption. 3d. It varies for the most part as to the time of the continuance of the Fever during the Eruption. & in some cases the Fever terminates favourably without an Eruption; & in some cases the Fever continues till the Eruption is complete.

4th. It differs again in the Nature of the effused fluid, in some cases a Serous fluid is effused, in some Lymph, in some Red blood. The first most commonly occurs. The 2d. terminates in Suppuration, & the 3d. appears

in Form of Petechiae, & is called the Petechial Small Pox.

5th There is a difference in the duration of the Eruptive Fever from 6 to 20 days; I have seen it continue for 20 days & prove fatal on the 20th.

6th It differs as to the Parts affected with it; It sometimes affects the Brain, the Lungs, Liver, & the Lymphatic & glands. Like other Fevers it changes its Seat, & sometimes appears even in the Kidnies.

7th There is sometimes a second Crop of Small Pox, after the first has disappeared. I have seen a 2d Crop brot on by exposure of the Patient to a Kitchen Fire.

8th In some instances persons escape the Small pox for a number of years, & many pass their lives without being affected by it, tho' exposed to the influence of its Contagion, of this I have known 2 instances.

9th I would beg you to take notice Gentlemen of a fact related by Hogarth, that the Small Pox is neither Contagious or Infectious while the Harmattan winds blew I have observed times in this City at which it is much more difficult to Inoculate so as to communicate the disease, than at other times, so that I think its propagation is influenced by the State of the Atmosphere.

The Anomalies of Failure in this disease Brow Inoculation, are 1st A failure in receiving the Disease

Which may be known by too quick inflamation of the part punctured, on the day of Inoculation, & by a Scab appearing on the Second or Third day after. 2d. No sore or Inflamation Excavation occurs on the arm, & yet the Eruption appears on the 8th day. 3d. A Second Crop of Pock sometimes appear Sometimes on 2 or 3 days after the first; & in one case a pock appeared on the arm 3 months after they had otherwise appeared. 4th I have seen the Small Pox taken a second time after the Eruption & Rash.

Two methods have been used in preparing Patients for the Small Pox; the one is by the use of Mercury & the other is by Purges. Dr Wilson formerly a Student in the University informed me, that of 200 Patients Inoculated, prepared by Mercury, 1 of every 20 had an abscess in the in consequence of the Inoculation; but in the year 1798 when we used Rhubarb & Jalap to Purge of 100, not one had an abscess.

Much has been written on the mode of Inoculation by the Kine pox. I was formerly prejudiced against it, but from the testimony of many Respectable Medical Characters, I am disposed to think favourably of it. Mr Cline who was formerly prejudiced against it, says, of 30,000 Patients Inoculated with the

Matter of Kine Pox, not one has died; and of all those cases which have afterwards been affected with the Small Pox; but even if a few cases had, it ought not to prohibit its becoming generally practiced, since we know that some persons take the Small Pox twice.

For an account of the Miliary Eruption (Miliaris) I refer you to Dr Sydenham. Dr Watson in his Medical Enquiries has made some observations on this Disease when it occurs in its putrid form: this I believe to be merely a higher degree of the common Disease, which requires more depletion. Bark & Wine generally prove successful, because the Stimulus is less forcible than that of the Disease; but in the commencement it might probably be useful. But Copious depletion should be used when the action is violent. A Diarrhoea sometimes succeeds the Measles which is difficult to stop. The only remedies here are a Milk & Vegetable Diet; Exercise &c. This Practice I adopt from Sydenham; but if these be unsuccessful bleeding will not fail when Tonics would increase it. The Cough which sometimes remains after Measles is relieved by the same methods.

For an account of Erisipelas I refer you to Dr Cullen, & would only observe that I use more Copious bleeding for its cure than he recommended: At now

& then proves fatal from a deficiency of bleeding. —
For all the other forms of Eruption fever, States of
Fever, I refer you also to Cullen, & pass to the

Hemorrhagic State of Fever.

Hemorrhages occur most frequently in Persons
the System of people subject to Plethora. Where the Ali-
ments or Ingesta exceed greatly the Excreta. From peculiar
Circumstances of Growth, & Cessation of Growth. A Mal-
conformation by which blood is determined to particular
parts. When there is a Venous or Arterial Plethora, Hem-
orrhages are ~~frequent~~ common. It is said Veins possess greater
strength in early Life, & ayded according to the Experi-
ments of Whitringham (or some such name) in this
respect to the Arteries about the 36th year; hence we find
Venous hemorrhage seldom occurs till after that period.
Young people are liable to Arterial Hemorrhage from the
Nose; and hence old people are most commonly
affected with Hemorrhage from the Hemorrhoidal
Veins, to . . . . . Palsey, Apoplexy. Younger persons
have Hemorrhage from the Nose, Lungs, here the Ar-
teries bleed; from the Hemorrhoidal Vessels & Vena Por-
tarum, Venous Hemorrhage is most common; And

and from the Uterus, Hemorrhage of a Unique nature occurs.

Stahl, divided Hemorrhage into active & passive. I reject the passive Hemorrhage entirely. I divide Hemorrhage into Tonic & Atonic. They bear the same Relation to each other that Inflammatory Fever & Great Morbid action does to Typhus: & yet there is in both Strong, or Marked action more or less. They are moreover, acute or Chronic; the former is less dangerous than the latter, which by effusion tends to produce Pneumonia. The Water of Hemorrhage are readily distinguishable by the Pulse. There is sometimes an alarming hemorrhage from trifling wounds without fever, tho' I have never met with an account of such on the Records of Medicine. Hemorrhages which prove fatal, are to common hemorrhages, what Petechiae are to Cutaneous fever without any change of the Arterial System. I knew of one family & heard of another, in which the slightest wound proved fatal. The predisposing cause of hemorrhage is debility; this occurs in every part of the body, but is the greatest at the surface; hence hemorrhage occurs most frequently in the Nose & Lungs, which, as I before observed, are a Continuation of the External Surface. There is greater debility in the Lungs for the predisposing cause of Hemoptisis, than for the predisposing cause of Pneumony, indeed Hemoptisis may be properly enough called Pneu-

monia

* These may be called Mechanical.

Pneumonia Carnenta, bloody Pleurisy, and differs from the other Species of it only in the effused fluid, which in common is Lymph bated, but in this case is Red Blood.

The Remote Causes of Hemorrhage are such as have a tendency to produce Debility. 1st. Sudden vicissitudes of heat & cold in the weather, hence they occur most frequently in the Spring & fall. 2d. Sudden diminution in the weight of the Atmosphere, which expands the blood. 3d. Whatever quickens the Circulation, as lifting heavy weights, too much exercise of any kind; also stimulating passions of the mind, as Joy, Anger &c. Joy causes a determination to the Lungs, Anger & Fear, to the Brain, Renewal appetite to the Uterus &c. 4th. Exercise of particular parts, as the Lungs in hollowing, coughing, sneezing. Hard Study seems to produce hemorrhage. Cold on external parts causing determination to another part, as cold feet to the Lungs. 6th. Great heat or prepare from too much clothing. 7th. Extremes of heat & cold. A determination to a weak part by habit. Animal Magnetism &c. &c.

Before we Speak of the General Remedies for Hemorrhage, it will be proper to Know, Is the Discharge Salutary? And Shall we depend on nature for its Stoppage? By no means, Nature cannot be depended on here; Bloodletting

is much better, since we may apply it to what extent we please, and adapt the quantity to the state of the system. —

The Remedies then should be 1st. Bloodletting. 2d. Cold applications of Air, Water & Ice: From the effects of this remedy arises a proof of the Proximate cause of Disease (Morbid action) which is then reduced by abstraction of Stimulus. — 3d. Purges, & very active ones should be used. 4th Certain medicines said to possess a Sedative power, as Nitre, Sugar of Lead &c. To prevent a return of bleeding, when morbid action is reduced by these means, gentle exercise should be used, a diet of Salt meat, Milk & Vegetables should be used.

In the Uterine Hemorrhage, Opium, Bark, Alum Heat, Cold Bath should be used.

I shall now add a few remarks on the different Species of Hemorrhage. They differ with regard to their Seats in different parts of the body.

Hemoptisis may be known by Dyspnoea. — May be distinguished from a discharge of blood from the Fauces, & that discharged from Vomiting, by its more florid colour, & in the Fauces the bleeding vessels can generally be seen, and also by the General Symptoms of Pyrexia which commonly attend. The predisposing Causes are Debility the remote causes the same as produce Pulmonary —

Consumption; there are still a Debilitating Nature. Three Fourths of the Cases of Haemoptysis occur at Night when most debility is present. When it occurs in Public Speaking, it is remarkable that it occurs not at the time of Speaking - but afterwards. Mr. Winchester who was much afflicted with this complaint, made this observation in his own Case. It seldom occurs however in persons who exercise their Lungs much; hence Lawyers, Players, Cryers, Watchmen, & persons who sing moderately are exempted from it. The Clergy are an exception to this Rule, they are often affected with Haemoptysis; but in them I think it is owing to the alternation of heat & Cold to which they are exposed by ever heating themselves in the Pulpit, & going then into the Cold Air. Mr. B..... who travelled thro' the N. States, observed that the Quaker Ladies were more subject to it than others, and he supposed because they used less exercise. I think it is owing to their not giving tone to their Lungs by Singing. The Germans in Pennsylvania, who teach their Children to sing almost as soon as they can speak, are exempt from it.

The indications of cure in Haemoptysis are, 1st. To lessen Morbid action of the Whole System. 2d. To absorb debility in the Lungs, and 3d. To absorb debility of the whole System.

The Remedies under the first head are, 1st Blood-letting, this ought to be regulated by the State of the System, Indicated by the State Pulse, according to the degree of Inflamatory Diathesis, it should be greater or less. 2d Cold, this is an excellent remedy in this Disease. The Patient should have a less quantity of bed cloths than Common. The late Dr Bond was troubled 15 years with this complaint, and cured himself, by wrapping himself in a sheet wet with Vinegar, after having in vain tried every other Remedy.

The 2d Indication is, to obviate morbid action in the Lungs; this may be done with Common Salt, it should be taken in large quantity, it acts by creating an action greater than the Disease, acts by sympathy between the Lungs & Faces, It creates a burning sensation in the Stomach which is communicated to the bleeding Vessels by Sympathy; it is however only a palliative Remedy when disease of the whole System exists. Opiates should be used, but only when morbid action is reduced.

The 3d Indication is to obviate debility of the whole System, & prevent a recurrence of the Disease. All the Remedies are here proper which were mentioned in the 3d Stage of Pulmonary Consumption. A Temperate Climate, Exercise &c. Dr Bond prevented an attack

for many years. by moderate bleeding before he expected one. the time of recurrence he knew from some premonetory symptoms. Is the Bark proper in this stage of the disease? I have used it with success after Bloodletting. — Sir Hans Sloan who first used it in this disease, obviated the complaint (to which he himself was subject), and attained to the age of 96 years, by taking every morning for the last 40 years of his life a dose of Bark. If is from the use of Bark in the 2d & 3d stages of the disease that it has been said to be improper; giving it when there was inflamatory action.

It is remarkable that persons afflicted with this disease, live to a great age. The late King of Prussia (Frederic 2d.) had it during the 7 years war constantly, and yet attained the age of 75. There is now living in Burlington an old man near 90 who has had it for the last 20 years of his life. In this case it is acute

Lecture 54th.

Hemorrhagic State of Fever Continued.

Hæmatemesis, is a Vomiting of Blood from the Stomach of a black Grumous Colour; it may be known by this appearance from the Haemoptysis. It is frequently produced by acrid substances swallowed, as Arsenic, Corrosive Sublimate & the like, also from Contusions on the Belly which ruptures a vessel in the Stomache It has been occasioned in some cases by a sudden stoppage of the Bleeding Piles, expectora of the Menses &c. The Remedies for it are the same as for other Hemorrhages; Bleeding regulated by the Circumstances if it is relieved by Bloodletting Stones may be given. I have seen the same good effects arise here from common Salt as in Haemoptysis; its effect here is transitory; moderate Exercise should be used & all the exciting causes of Hemorrhagy avoided.

Epistaxis, or bleeding at the Nose. It is defined very accurately by Dr Cullen (Quid Vide). It is preceded by a pain in the Head; the discharge is of

arterial blood. It occurs most frequently in Young People, tho sometimes in old. It is excited by many causes. Mr Bruce says it was induced in him by a sudden gust of passion (anger.) Intense Study has caused it. Picking the Nose has also caused it.

I have seen it twice fatal where it occured in the Autumnal Fever; the pulse here continued unaltered by it, & continued quick, full, & Tense.

The Remedies are to be accommodated to the State of the System: Bloodletting should be active. Rest in a recumbent or sitting posture; Plugs, these never failed in my practice, except in the two cases mentioned. They should be worn two or three days after the bleeding has stopped to prevent its recurrence. Cold applications to the Body & especially to the Scrotum should be used. To prevent its recurrence when bleeding is stopped, Ligatures around the Neck and blowing the Nose should be avoided.

Hemorrhagia Uterina. — Occurs most common-ly where the Menses have ceased. A Recumbent posture is here requisite, and Cold applications should be made use of to the Pudenda. The application of flour is a great Servi[illegible] here. It appears to check Hemorrhage by decomposing the Blood, absorbing its watery parts, and thus producing a Coagulation. — This Hemorrhage is either 1st Uterine or 2d

Tonic. In the Atonic state Opium may be used with advantage. In the Tonic, Bloodletting is sometimes requisite.

In Chronic Cases I have used large doses of Sacharum Saturni to great advantage. The disease is very apt to occur in such persons as are subject to Miscarriage; here gentle Exercise occasional bleeding Cure & prevent it. 6 gr. at a time is generally sufficient to be repeated when the Pulse becomes active. A Diet should be ordered consisting of Lait Meat milk and Vegetables.

Bleeding Piles. These are often an alarming Hemorrhage; it seldom occurs however without much action in the Pulse; here Bloodletting should be used also astringent Glysters & drinks. Where depletion has been performed, Laudanum, Tonics, Blisters, Basks &c. may be used with advantage.

Hemorrhage from Wounds. Is sometimes troublesome to stop. Cold air is the best application that I know of; hence the number of Soldiers that recover from their wounds in a field of Battle. I am persuaded that many of them would die if carried into houses. But the Coldness of the Night air stops effectually the Hemorrhage. A Huntsman told me a fact in proof of the utility of cold air in stopping Hemorrhage.

that Dog when wounded always runs to the stream of water nearest at hand; however, wet applications should be avoided, lint & flour should be applied, & compression. I have sometimes seen a profuse hemorrhage from the Nose succeed the drawing of a tooth which was troublesome to stop. A Cork however, answers the purpose. Sacharum Saturni should be used.

Hemorrhagic State of Fever.

The absence or Suppression of the Catamenia is almost in every Instance attended with febrile Irritation symptoms, & for this reason we should always feel the Pulse before we prescribe. It should be consulted in all our prescriptions. It has always been considered as a Chronic disease. This is a great mistake. the pulse is full, tense quick & there are all the marks of great febrile action.

Bloodletting should be used till the Pulse is reduced Purges should be given especially of Aloes, which is supposed to act Specifically on the Rectum, and by Sympathy would act on the Uterus.

These Remedies are proper in the acute Stage of it. but the disease is sometimes Chronic, & here Tonics may be properly used; Chalybeates, Calomel & Exercise.

Without attending to the Pulse it is impossible to cure this disease. I was unsuccessful in applying the whole class of Emenagogues, till I treated it as a State of fever. Dr Astruck says that Women cannot be easily cured when they have been about 7 years: This may be the case, but they may be cured when they have been about 2 or 3 years.

In the EXTERNAL MEMBRUM, as it is termed the Vagina should be examined, as the Symptoms often proceed from an Imperforated Hymen. Of this I have seen two Cases.

Hemorrhoidal State of Fever.

This disease is commonly supposed a Local one, but the whole System is brought into Sympathy, & it becomes a General Disease. It is of course accompanied with a heaviness of the head & pain over the Eyes; pain in the extremity of the Rectum.

The Hemorrhoids are External & Internal: the latter are called Blind Piles. It affects both of all ages, Women more than Men. Habitual use of Aloes, habitual Costiveness, long walking are apt to induce it: much Riding on horseback frequent-

ly

weakness it is. When; & lastly, it is a Symptom of Gout.

We begin the Cure by Bloodletting, as much as is Indicated by the Pulse. Bleeding should be both General & Local. The only Country where Leeches are not used for Local Bleeding, is here; they are very useful. I had last Winter two violent Cases of this Complaint; in one I was called on the 3d. day, I bled 3 times, & took 3 pints of Blood; in the other, I was called on the 2d. day; I was obliged to take 100 ℥ of Blood at 12 bleedings. Fistula in Ano might be prevented in 99 cases ℥ 100 if bloodletting were carried to that extent Indicated by the Pulse. Next to bleeding Gentle Purges, especially of Sulphur should be used. A Horizontal Posture should be observed; this does much good where they are External. Cold applications to the part, as Water & Ice should be used. The Smoke of Leather I have known useful. Certain Sedatives, (as they are called, i.e. active Stimuli) may be used with advantage, as Sugar of Lead, but especially the Stramoni = um Ointment, made of Stramonium Leaves boiled in melted Cerate. I have used as an external application the following prescription. Rx. Sach. Sat. Pulv. Gal. Pulv. Opii aa ℈j Unguent e Stramonii ℥ss. Tar is useful & Tobacco in some cases, does good: Also a Solution of Sugar of Lead & White Vitriol.

The Hepatic State of Fever.

I have called this a misplaced State of Fever (See my 4th Vol.) It is called by writers Hepatitis. Its Symptoms resemble those of Bilious Colic generally attended with fever; but in some cases there seems to be such a concentration of excitement to the Liver, that Morbid action seems absorbed by it. It may generally be discovered by the Pulse. Dr Cullen has described the Hepatitis as "anomalous with pain in the Side extending to the Shoulder, with an inability to lie on the affected side". A Yellowness of the Skin is noticed by some Authors; but Dr Cullens account is the most correct, as the different decubus, is an invariable Symptom — I would only add that I have sometimes Known attending as a Symptom of this disease an inability to move the lower extremities. This more especially occurs when the Liver has suppurated.

Patients are unable to Sneeze even when the most powerful Sternutatories are taken into the Nostrils. In some cases the Pulse continues soft during the whole of the Disease; but most commonly it shews signs of Morbid action. In some cases the Skin is yellow & some not. In some cases there is no pain. It proceeds from all the causes producing Bilious Fever.

Professor Monro has divided it into Acute & Chronic, with this division of Diseases was more attended to. Phrensy & Phrenitis, Dysentery & Dysenteritis, Rheumatism & Rheumatitis, Pneumonia & Pneumonitis, would as certainly obtain as the Acute & Chronic Stages of Hepatitis. L

It is sometimes produced by Gallstones, but is most commonly a Misplaced Bilious Fever. The Liver disease of the East & West Indies is nothing but this Bilious Fever concentrated to the Stomach; its remote cause the same as — Yellow Fever, Marsh Miasmata; & Dr Chisholm adduced that its causes proved it to be a Bilious Fever. Its exciting causes according to the Dr is, Cold air, Intemperance in Eating & Drinking; & the Passions of the Mind, exercise, bad water, with too little & Vegetable food, also improper use of Mercury; And in general the exciting causes of bilious fever. It is sometimes preceded by a Chill as the Remitting Fever & it seldom affects Persons under Puberty. It is accompanied with a disrelish to Bark & Wine as in all bilious Fevers. — Now this is a characteristic Mark of Yellow Fever & according to the observations of Dr Clark of Dominick it affects one more than women in the proportion of 7 to 2. It is proven moreover to be a Bilious Fever by its Cure. This consists in the first place of Bloodletting. Dr Clark of St Domingo says the bleeding to prevent suppuration should

be very copious. I drew from Mrs Moffet 150z without being able to prevent Suppuration; but I saved her life by the means of bleedings.

In some cases there is a translation of morbid excitement to the Brain & Lungs, & bleeding must be here copious to prevent Death. In some cases of the Disease back may be used. There is more & then a discharge from the Stomach of matter, Bile or Blood, which comes on with a Cholicky pain. The next remedy is Mercury in sufficient quantity to excite Salivation. The Mercury seldom effects the mouth after Suppuration has commenced, owing to the Suppurative action transcending that of the Mercury on the Salivary Glands: possibly this may be the reason we cannot salivate in Consumption, as is the fact. It occurs too in other States of fever. Mercury has been observed never to Salivate when it first produces soreness in the mouth for the same reason;- It has been supposed to act Specifically in this disease. The opinion originated in Barry, it acts as in all other cases of fever, by exciting a deper action in the mouth. There appears here to be a Metastasis of Errors as well as of Diseases; formerly each disease, as it appeared in particular parts, was supposed to have a Specific cure in the Vegetable Kingdom; hence the origin of Tongue Wort, Liver Wort &c. But mercury

appears now to absorb & unite all their virtues ..

Since the discovery of the proximate Cause of Disease.

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'Tis as absurd to multiply diseases & their causes, by their different Symptoms, as for Savages to place a partic-
ular Deity over each Element. But the practice of those who adopt the Idea of the Unity of Disease; is as rational as the worship of those who believe in the Unity of Deity ..
A Physician may acquire some Credit among his Ignorant Patients, by making a display of his Knowledge of the Caus-
es & Symptoms of Diseases, but they resemble a Child who supposes a Man who makes a display of 100 Cents much richer than one who possesses a Single Dollar!!!

The Inflammation of the Liver in this disease, does not always terminate in Suppuration, many cases occur where it ends in Schirrous; and in some it terminates in an absorption of the Substance of the Liver; this occured in the Case of Sir William Jones; his Liver on dissection was found obstructed, & no part of it remain-
ing but the Blood vessels.

The Cases when it Suppurates open differently. 1st Externally thro' the Skin. 2d Internally in the Body. 3d

In the Cavity of the Abdomen. 4th It sometimes perforates the Diaphragm, & opens into the Cavity of the Thorax & into the substance of the Lungs, where it proves mostly fatal. 5th Into the Pericardium. A Case of this a Dr Clark mentioned to me. There is none of the Kind on Record to my Knowledge, it occured in the East Indies.

Where the Abscess points Externally it ought to be Punctured; 2 of 3 recover where this is done, but it is mostly fatal where it is allowed to open of it self.

Lecture 55th

The Scrophulous State of Fever.

Scrophula has long been suspected a Specific disease of the Lymphatics. It is so, but seldom fails to bring the Arterial System in to Sympathy; but in most cases the affection of the Glands is Secondary, and the disease as the is originally Arterial. Most of the Glands in the Body are subject to Scrophula; it appears in the Breast, groin, Axilla, Testicles &c. But it is not confined to the Glands; the Muscles are sometimes

affected with it, as the Psoas, occasioning the Psoas Abscess. There are External, the Internal parts subject to it are the Mesenteric Glands, Lungs, Liver, Spleen, & Ovaria. It appears occasionally in the bones, & is called Rickets. In the Teeth it very frequently occurs. This disease is very common in England. Dr White says he attended there in one of the Hospitals 12,00 Patients with Scrophula. I have not seen 100 Cases in my practice during 40 Years in this Country: it is very uncommon in this Country: The Rickets is still more so; in England it occurs frequently. Scrophula then, is supposed a disease originally of the Lymphatics. But in Barbadoes where it frequently occurs it is that properly ~~malaxxxx~~ of to be an Arterial disease translated to the Lymphatics. Dr H..... very accurately describes it a Surfeited State of Fever. I am of this opinion for the following Reasons. 1st. because it is produced from the same Remote & exciting causes as Fever. as Marsh Miasmata, alternate exposure to heat & Cold. 2d. I infer it from its coming on as other febrile diseases being preceed generally by a chill; & from its being attended with the Symtomes which occur in Fever. Inflamation Pain, hard, quick & Tense, & in some instances a Natural Pulse; their Sweat occurs frequently in Fever. The Teeth & gums are black in Scrophula; the Cutter smelled as

occurs in other States of fever. Dr Hawley says the blood drawn is not sizey; this is true, but it only proves that the action is too great to produce sizey blood, or else not sufficient both of which occasion is often the case in other fevers. Dr Hillary considered it as a fever, & also Dr Hawley a fever of great inflammatory action. 3d I infer it to be a febrile disease from its attacking all sexes & ages. 4th It prevails most in those Climates & seasons of the year in which other fevers are common. This disease was formerly unknown in Barbadoes, but it is now very common there; this is attributed to a change produced in the air by the clearing the Land, there are now no woods on that Island.

The Scrophula is either Idiopathic, or Symptomatic (Viz. Miseland fever.) To distinguish this however, is a matter of no consequence, since the Remedies are to be the same & to be regulated entirely by the State of the System. —

Where the Tumors are hard, Red, painful, Inflexible & Inflamed, & a full Tense & quick Pulse, Bloodletting and low diet should be prescribed. In a contrary State of the System, where the Tumors appear relaxed & the Pulse is not active, Tonics are to be used, Sea Salt, Sea water, also bathing in Sea water; Opium, a generous diet are especially Mercury & Epsom should be used. Bonda
ges —

Bandages should be applied if the tumors appear on the Limbs; but in all prescriptions, the State of the System must be attended to. It is frequently necessary to change the remedies 5 or 6 a dozen times in this disease, & after using Tonics to resort back to V. S. &c. as in Pulmonary Consumption. The Scrophulous tumors are not to be neglected. Some Practitioners advise to open them, but I conceive this practice to be wrong; & I think it never should be done except when the abscess is situated over a large bloodvessel. —

The Scorbutic State of Fever.

Many facts concur to prove the Scurvy a State of fever. First, I infer it from its being produced by the same causes (viciated excitants) which produce other fevers, as Cold, Penury of food, or bad food, depression of mind retained Perspiration, also from Marsh miasmata. For a proof of a number of these cases, see Dr Claibornes Inaugural Thesis. 2d. I infer it to be a State of Fever from many of its Symptoms, as great debility in the Muscles, tense Pulse, Petechiae on the Skin &c. I formerly spoke of an Introverted Fever (the Dysentery) This I conceive also a retrocedent misplaced Fever, Introverted to the Skin & Suffocated there. These Symptoms are

not to be neglected, I have seen them prove fatal in several ~~instances~~ Cases during Pestilential Epidemics.

The Remedies for it should be accommodated to the State of the System as indicated by the Pulse. I have heard of it being cured by Aromatic oils & acid drinks, together with a vegetable diet. In the East Indies they use Nitre & vinegar with success, but we must not suppose Scurvy a disease of the Blood; 'tis no such thing, the Solids are the seat of it.

The Scurvy has 2 States, the Tonic & the Atonic as certainly as Plague & Yellow Fever. To satisfy you of this, & the success of practice directed by a knowledge of this, I will read a letter from Mr Moor. (Read.)

Opthalmic State of Fever.

Of the Opthalmia Dr Cullen describes several Species: they are all more or less alike & to be treated in the same manner, as the same disease. For the most part it is a disease of the Whole system. The Remote causes such as produce Fever.

The Exciting causes are ~~such as~~ produce external violence to the Eye; Particles of foreign matter as dust, Sand, Snow, Salt &c. also excessive light.

rising or walking in the snow heat &c. A very dry heat air has been known to produce it. In Svenna it is often caused by the hot winds which blow from the Desert of Nubia. In Surinam it is Endemic from particles detached by Carriages from the Calcarious Walls with which their Streets are paved. In Kentucky it is Epidemic in the Spring season from the Pollen of vegetables irritating their Eyes. — In the Autumn it is often a symtom of Bilious fever from Marsh Miasmata, or rather the Bilious fever is translated to the Eyes: But further, it often proceeds from Stimulating acrid Vapours, as that disengaged from Nitre; this acts as the Remote Cause. Ramazini noticed that those persons, whose business consisted in Clearing Privies, were much affected with sore Eyes. Great Light frequently produces it. A Hickory fire will cause sore Eyes where an Oak one will not have that effect. Inverted Eyelashes has often produced it. Those Persons who eat much Garlic & Onions, are said to be predisposed to it. — Mr Volney says in Grand Cairo the Inhabitants are very subject to Opthalmia from this Cause. Acrid matter of any Kind as Syphilitic, Scorbutic &c. produces it. Also any substance stagnating in the Excretories of the Sebaceous glands of the Tarsus. The Venereal disease

sometimes appears in form of Opthalmia; an unusual determination to the head has caused it.

The Remedies for it are the same as for other inflammatory diseases, and must be accommodated to the state of the system. Bloodletting is necessary in every case, but must be general only when the Pulse requires it. Topical always by Cupping, Leaches, & especially Scarifications of the recesses of the Conjunctiva, or Membrane Palpebrarum. 2dly Purges should be given where the whole System sympathises. Blisters should be applied behind the Ears, & around the Eye or forhead & Temples. Topical applications of Cold water are useful in the first Stage of the disease. Also a wash should be used after the Morbid action is Reduced (subdued); of a Stimulating nature, as Infusion of Oak Bark, Log wood, Peruvian Bark & opium is useful. Dr Physic mentioned to me the following prescription as an excellent one.

℞ Opii ʒi
Gallae .. ʒij
Aq. Font. ʒiv M. F. Collyr.

To be dropt into the Eye once or twice a day. A Solution of Sugar of Lead or White Vetriol or both answer very well. Electricity has been used with advantage where from Inflammation, the parts had become relaxed.

Now & then Opthalmea is produced from an hair from the upper Eye lid being inverted into the Eye; this should be extracted. Sand & other extraneous matter should also be examined; an Eye stone may be used for this purpose, but a Method I have found very useful, it to direct any patient to put his head into a bucket of clear cold water, & keep open his Eyes as long as he is able. the matter will most commonly be washed out by this means. Smiths & people working in Iron, frequently have small particles of that Metal lodged in the Eye. Heildanus relates a case in which he was unable to extract such a piece of Iron by any means, till he used a Magnet, when it was drawn out. When it is occasioned by Stagnant Matter become so by Stagnating in the Excretories of the Glands of the Parts, demulcent applications should be used, such as an infusion of Quince Seeds, Isinglass Pith, or any mucilaginous Matter. Where it arises from Scrophula or Lues Venerea, we must treat the Patient as if laboring to cure those diseases. Mercury should be used; An ointment made of equal parts of Lapis Calaminaris & Hogs Lard, I have seen do wonders when the disease arose from Acridities in the Excretories. It acts by fortifying against the Eroding Matter; it should be used at bedtime.

All irritations to the Eye should be carefully avoided; and the Patient kept in a very moderate Light. Setons & Issues behind the Ears, are of great use in obstinate cases. Dr Campbell of Lancaster, says he has cured the disease by Opium — when every other Remedy had failed; that & Bark to be used only in the atonic State.

Odontalgic State of Fever.

This Disease consists principally in a pain in one or more of the Teeth. That it is a State of Fever I infer from it occuring at the Season when Inflamatory Fevers prevail. That it is Inflamatory I have no doubt since the Teeth are proven to be supplied with Arteries & veins. Whether they have Nerves is not essential to our purpose. 2dly I infer Toothache to be a State of Fever, because it occurs in Sound teeth first. The Teeth do not always ache in consequence of Caries, but pain always proceeds the Caries of Teeth, Sometimes the teeth do decay in toothache from the effusion of corroding matter; this matter when poured out from Carious teeth is so acrid, as to corrode the Gums & Jawbone. Not only the Enamel of surrounding healthy teeth, but also the Silver Wire made use of to prevent & secure the the Teeth in the gums (artificial.) 3dly The Toothache

is unknown in those Countries which are uniformly Warm or Cold; it is equally rare in Norway & Russia, as in the West Indies, & other Countries in the Torrid Zone. It is very common in variable Climates. St Kitts is the only one of the West India Islands where the Toothache prevails. & there it arises from the Cold temperature of the Water they drink. 4th It prevails most in that period of life when we are most subject to Inflamatory fevers; it seldom occurs after 60 years of age; Thus we may reasonably conclude the Cause of the toothache is Inflammation induced by the common causes. Sweet as Sweets, Sugar, Salt, Animal food &c. The French people on the West India Islands, who eat an immense quantity of Sugar, & the Negroes, have excellent Teeth. They may expose pain when the Enamel is Eroded & the Nerve laid bare, but under no other Circumstances. It occurs as be observed before in young people, principally, Sometimes till 36 or 40, never later. It is often attended with a quick tense Pulse which gradually increased for 3 or 4 days, & then Ceases, upon a Swelling taking place on the Gums & Cheeks. Sometimes the Swelling extends to the Parotid or Jawil Glands. Sometimes abscesses are formed between the Teeth, & sometimes in the Jaw bone; The Antrum Maxillare sometimes happens to

be affected after a frequent recurrence of the Disease. In many cases there occurs a Sympathetic Toothache; a tooth on one side shall be inflamed & the one directly opposite on the other becomes painful: this takes place in the other parts of the body also. Dr Lister always had a Toothache when his Stomach was disordered, & could cure it by giving Tone to his Stomach by a glass of Brandy.

The Remedies for Odontalgia are, 1st Extraction. This is the most Universal; but it can only be performed with propriety after the Inflamatory Symptoms are gone off. If the tooth be extracted during the Inflamatory action, twice the pain & danger are experienced. 2d Purges are to be used where the System is affected 3d Emetics. Mr Townsend says it is cured very effectually by an Emetic. 4th Blisters behind the Ears of the affected side: this is an excellent Remedy. Other Stimulent applications may be used. A Roasted Fig has been used with much advantage; it acts in the same manner. Opium is an excellent Remedy, it may be given in large doses, 3 150 drops. Poultices to the Face of Laudanum, Pepper, Ginger; & other Stimulants to the face. Opium should be given after the pain subsides & extraction is to be proceeded to. I shall only add one other Caution on extraction, that the Patient will submit to it with

most Courage after a hearty Dinner.

Where the Pain proceeds from a hollow Tooth, three Remedies may be used. 1st To fill up the Tooth with ... Lead Tinfoil or Gold Leaf. 2d To destroy the bear Nerve by Cautery. & 3d Extraction; this last is most radical & proper, as it prevents the accumulation of acrid corrosive matter which would destroy other Teeth. When the Diseased tooth is situate in the upper Jaw, Abscesses are very apt to form in the Antrum Maxillare; that is to be relieved by extracting the tooth immediately under it, and then allowing an escape to the matter collected. A Celebrated Dentist informed me that he never had occasion to puncture the Jaw as recommended by Authors; the extraction of Teeth always allowing vent to the matter. These cases are sometimes fatal, I have seen one Instance of it.

Having Spoken on the Cure of Toothache, I shall make a few observations on the Method of retaining & preserving a good Set of Teeth. 1st Let the Milk teeth as they are called be extracted as soon as they become loose, in order to allow the Second Set to come up Straight. If any irregularity is perceived in the Disposition of the Second Set, it must be remedied by retaining it in a Straight position, by means of Silver

like Pastined to the neighbouring Teeth. Deformed Teeth like malformation in any other part of the body appear to predispose to Disease, & beauty of the Teeth appears in Regularity, & Whiteness tends greatly to preserve their health; at least, they are much less commonly diseased than those of a contrary description. If any one projects inside or outside of the Regular Row it should be extracted. 2dly Remove a diseased tooth as soon as it loose or painful, or when it becomes painful unless. The Patient will not eat on a Tooth that gives him pain, & by chewing on the other side the decayed tooth will become loose for want of exercise. 3dly avoid the Early use of Acidulated & immoderate use of Acids which corrode the Enamel & lay bare the Nerves. 4th Protect the Head & Jaws from Cold; keep them warm by flannel Night Caps, this tends to Equalize the heat. The French people by using Woolen Night Caps avoid the Toothache in a great measure. 5th Wash the Jaws every morning, externally with Cold water. 6th Wash the teeth and mouth with water of an agreeable temperature, by blending allmight or rendered warm by adding warm water to it. They should be washed after every meal especially at night after Supper, for the Relics of food will become Acrid & Putrid by stagnating all night.

7th Avoid eating alternately hot & Cold foods & Drinks.
8th Avoid using the Teeth for purposes, for which they were not intended, as Cracking Nuts, biting hard fruit or Apples, biting thread &c. &c. 9th Carefully remove the Tartar as it is called, as it collects around the roots of the Teeth; this should often be done. 10th Avoid the use of all acrid or acid Tooth Powder; this corrodes the Enamel, also too much friction which has the same effect. Peruvian Bark answers very well as a Dentrifice. A weak Solution of Vegetable Alkali is a very excellent substitute to wash the Teeth, it serves to whiten them very much: A Solution of Soap answers very well the same purpose. Where the Teeth are bad, it has been practised to extract them & put others in their places, called Transplanting. It has been common to put a fresh tooth just taken from another persons Jaw. This has been done from an Idea that the Tooth & Jaw grew together: But it is not so, the Tooth is secured as a Nail in wood; & wood will be as tightly secured as a new tooth, as has been proven in a Dog: The best way is to put a dry tooth in the Socket; it adheres with sufficient firmness, & answers equally well. This is at best a bad method; the operation is painful, & the Tooth cannot be secured very firmly, & even if it should succeed

it is very Temporary, last but 4 or 5 years at most:-
A 2d. mode of Pivoting answers much better by fixing
a Pin of Silver or Gold into a tooth either natural or ar-
tificial, & adapting it to the gums or old Socket. But
this mode is also exceptionable, the Pivot wears away
& the hole becomes larger; it must be renewed every
2 or 3 years. I would recommend the Patient to
clean the Tooth every 2 or 3 days & replace it. I
have known them swallowed in several Instances.
A 3d. mode is to tie Artificial teeth to the Natural
ones by a thread or fine Wire; this answers better
than either of the two other Methods - 4th. By
forming a set of teeth Complete for the upper &
lower Jaws of Ivory: This a Citizen of Philadelphia
has done, & assured me he can chew the hardest
food, & Crack a Nut with it -

Lecture 56th

The Convulsiv State of Fever.

This is an increas of Muscular force occuring in fever. It appears either as Spasm or Convulsion. Spasm is a Constant Contraction of the Muscles. Convulsion is alternated with Relaxation.

Spasms are either Tonic or Clonic, as is Seen in Tetanus.

Convulsions occur most commonly in Children, in all their Diseases, as in Hooping Cough & many others. It is moreover a Symptom of many of the forms of fever, as the Malignant & Puerperal. The Yellow fever in some cases comes on in form of Tetanus.

Spasms & Convulsions are either general or Partial.

The Remedies are the same in both, & must be regulated by the State of the System as Indicated principally by the Pulse. When much Morbid Action occurs, bleeding & Depletion as in fever should be used: Purging, Cold air Blisters &c.

Otaqic State of Fever

This is an Inflammation of the Ear attended with

great pain & Symptoms of General fever. It principally affects Children, sometimes old people, but rarely people of Mid-dle age. Where the Whole System Sympathises and much Morbid action appears, Bleeding should be used & Purging, Blisters behind the Ears of the affected side also other Stimulating applications, as warm oil. After Morbid action is relieved by depletion, Stimulant applic-ations are to be made to the Ear; hot oil & Laudanum are to be injected into the Ear: A Roasted Onion answers very well, or a Pig. If possible Suppuration must be prevented, as the hearing will be much impaired if it takes place. Copious depletion prevents a possibility of this.

Aphthae. Sore mouth sometimes puts on the form of fever. In the West Indies it is attended with great Inflammation & Fever; Sometimes in Holland it has been Epidemic. I have never seen it so here. I sporadic Cases I often meet with & have called the Aphthous State of Fever. It occurs most commonly in Children, & has been supposed to arise from acrid Meconium retained in the bowels.

The Remedies for it are washing the Mouth in Molasses & Water, Honey & a Solution of Alum. The bow-els should be kept gently open with Magnesia Rhu-barb & the like: This prevents the Disease in Infants

where it arises from a Retention of the Meconium. In N. York this Disease prevails more than here; it is there called the . . . . . and now & then proves fatal. When acute it is seldom fatal; but a sore mouth is frequently the last symptom of ~~Hy~~ Hypochondriasis, & then I have never known patients recover after this Symptom: Also in Consumption; here there is said to be a complication of Disease; 'tis no matter, the cure must be accommodated to the State of the System, - where the Pulse is tense bleeding should be used. Blisters become necessary where the disease assumes a Chronic form. It is more fatal in its Chronic than Acute State.

Hypochondriac & Hysteric States of Fever.

I consider both these as States of fever, attended with feeble determination of Morbid action to the Brain. In Hypochondriasis, this causes the Death Phobia.

In Hysteria there is a disposition to shed Tears, & to Laugh, also a Rising in the Throat, called Globus Hystericus. Pale Urine & in some cases the Clavus Hystericus. Here there is said to be a combination of Diseases. The same Remedies must be used as for other States of Fever. You must be guided by the Pulse

The last Stage of fever in our Syllabus is the

Cutaneous. I shall begin with remarking here that this is always connected more or less with general fever; & probably always arises from the same Remote causes as fever. The Plague & Elephantiasis appeared, continued & disappeared together in France, & most other European Countries. Dr S..... says the Eruption which occurs at Barbadoes is a Modification of the Epidemic of that Island. S... has observed that a kind of Scab like the Itch appears on an Epidemic at Portsmouth, which requires depletion to cure it as fever in general.

Where Eruptions occur on the Skin during the prevalence of an Epidemic, it preserves from that disease The Prickly heat Dr Hillary observes, prevents an attack of Disease in the West Indies. In some cases Epidemics alternate with Eruptions. But further, all the remote Causes of Epidemics, do also produce Eruptions & aftermath, as Cold, or Intense heat & Cold, Contagious Miasmata, & even certain Substances taken into the Stomach will produce Eruption on the Skin. From this fact I draw 2 important Inferences, the one Speculative & the other Practical: the first is

is that Cutaneous and other States of fever are the same, & arise from the same simple origin. Thus why not call Pseudo Eruptions "Febres Etrorsa" — as we call Dysentery very properly by "Febris Introversa". They are the same, appearing at different parts of the System: One is Morbid Action Translated from the Arteries to the bowels, the other to the Skin. —

The perfection of every thing depends on its Simplicity: The Causes therefore of Diseases are One & Indivisible, just as the Cause of Moral Evil is one & Indivisible. . . . . .

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The 2d or Practical Inference, is never to loose Sight of fevers in prescribing for Eruptions of the Skin. — They can only be cured in this Way.

The Remedies are the Same as for fever, & depend Wholly on the State of the System. Another Reason for this practice exclusive of the Unity of the Causes is, the Success which has attended this mode of treating Sore Legs.

I recommend the further Consideration of the Subject to you all; for my Speculations, if

it be true, will be useful, & if false, can do no harm. I shall relate one fact more in support of the opinion. A Gentleman in Maryland who had been Inoculated for the Small pox, had 3 years after a Tumor on the back of his Neck, which soon filled with a Limpid fluid, & turned soon into Matter: the Tumor burst & the matter discharged & ran down the Back. He had in consequence of this Variolous Pustules form all over his back where the matter had been in contact, which suppurated as usual. This tends to prove also the great length of time that the Innate Causes of Disease may lurk in the System without being excited into action "Wrong Action."

Leprosy. Is certainly a Whitplaid fever, hence (from fever) the origin of that Species of it attended with black Skin: This black Color depends simply on the black Blood stagnating in the Rete mucosum. That the blood does become black in some fever there is no more doubt than that the Bile changes its colour from Disease. I have related a Case in my 4th Vol. where the blood of a person in the Yellow fever, was quite black. As the Cholera Morbus is a Bilious fever turned inwards, so is Leprosy a Bilious fever turned outwards.

The same Remedies that cure Leprosy, cure Plague

& yellow Fever. It consists principally in Powerful evacuants, by Vomits, Purges, Bleeding &c. Dr Van Rohm an Intelligent Physician who was in this City sometime since informed me that the Spaniards Cure the Leprosy by Eating a Lizard in the Spring of the year which feed on a particular Spider Called Roma..... aris: the flesh of the Lizard contracts a poisonous quality from this food which renders it a powerful Evacuant by Vomits & Stool & the Scales of the scaly Skin. Tar has been used in large doses in Leprosy. Dr Pierce of Barbadoes says it operates as an Evacuant on the Stomach & Bowels. Moderate bleeding should by no means be neglected. Bloodletting here must be used as an Alterative.

I have no doubt that when old age & Casualties will be the only outlet to human Life, that the Cure of the Leprosy will be found to consist in the Lancet. Three things concur to shew the propriety of Bloodletting in Leprosy: 1st The Symptoms of Redness & Scales on the Skin, & the Swelling. 2d The wonderful effect of Bloodletting on the Skin in other Fevers, Malignant Fevers, preventing Petechiae, & relieving the preternatural heat & Coldness & dryness which occurs. And 3d Its great efficacy in Curing Sore Legs & Ophthalmia. We must moreover promote the Exertion of Sweat. I have ever succeeded in

in Curing a Young Lady by three two Remedies (V. S. & Sweating) in this City. She recovered perfectly & has since ~~xxxxxxxx~~ partly Died of a Galloping Consumption; before which She had a violent Opthalmia. Nothing more decidedly proves that Leprosy is a Mitigated State of Fever than this Case. The Morbid Excitement was first translated to the Eyes & then to the Lungs; it was still the same disease occupying a different Seat.

Leprosy is certainly Curable, or else Heaven, like Man, would be Kind by Halves; and the Cure is not in the Lancet and other depleting Remedies.

This disease was formerly infectious & propagated by this means; hence, there no doubt, the Origin of the Ceremony of Circumcision. The Prepuce was apt to retain the infectious matter longer than any other part of the body, & it was thus more generally propagated by Venereal intercourse. The Ceremony was directed to be performed on the 8th day after Birth, as at this age there was less pain and danger than at any other. A Rabbi whom I once saw operate, informed me that he had never known an Instance of Death from this operation. Circumcision answers another very good purpose; the first Symptoms of the Venereal, & in many cases the most trouble occurs under the Prepuce. The Jews, by not having the Prepuce

℞ The Earth Bath as a remedy for this disease has been used with great advantage: It consists in burying the Patient up to his neck in warm dry earth; a profuse Diaphoresis is the Consequence.

in a great measure avoid the Venereal Disease; they are at least, much less subject to it than Christians.

It is a Rare thing in the Eastern Countries, especially among the Turks for the Jews to have the Venereal Disease; - this information was given me by Dr. ..... This - is truly one of the Physical advantages derived from adhering to the Injunction of Moses. Circumcision is alike calculated among the Mahometans to prevent many Physical Evils. ✠

With this Gentleman, we finish our account of those States of fever in which the Arterial System alone is affected. We should next in order proceed to the diseases of the Nervous System. Of the causes of these, I shall make a few preliminary observations, & then proceed to treat of a few States of fever in which the Arterial & Nervous Systems are both concerned. Palsy, Apoplexy, Mania. &c. In the diseases of the Nervous System, I shall include those of the Nerves, Brain & Muscles.

In one of My Vols of Eng. & Obs. I have anticipated that the time will come when Casualties & old age will be the only Natural Causes of Life. I have also asserted that Fever is the only Natural Original disease of Man. The Blood - & Septic Spirit receive the Shock of all the Causes tending

to Create wrong action; they are the out parts as it were of the System. This Stock of the System in which Power is naturally the only disease, arises from the most simple manner of living, to wit, a Savage Life; such as Savages enjoy: the further a departure is made from this mode of life, the more disease appertains the Nervous System. In the time of Dr Sydenham Nervous diseases were so rare in London, that of . . . . . persons who died in London 66,000 perished of fevers; whereas now, not more than one sixth of the diseases there, are febrile, owing to the prevalence of Effeminate manners & Customs in that City. Apoplexy, Palsy, Hysteria & Hypochondriasis are much more frequent now. As Effeminacy increases, diseases, or rather Shapes of diseases keep pace. But why need we turn our Eyes to Great Britain? we see in this Country the great change induced in diseases by Luxury, & increase in civilized Customs of Society. Pneumony was 50 or 60 years ago, a much more prevalent disease than of late, owing to the simple mode of life in those days predisposing to Inflamatory diseases.

From this view of the subject, I think it probable that we shall in future time be able to distinguish, as readily the Rank people hold in Society by their Diseases, as by their Titles of Nobility. Thus the first order of Nobility by their Penny diseases of Light tripling — Morbid Action; While the 2d order of Nobility & the Wealthy Citizen will be subject to Gout. Those of Inferior Station in Life, as Mechanics & Labourers will be liable to fever of inflamatory action; but even there will probably be so feebly, as to constitute at most Typhus! & Pneumony & Violent Inflamatory fever will exclusively belong to Porters, Sailors, Soldiers & Chimney Sweeps

It will be considered a Mark of great Vulgarity to have an Acute disease; & people will blush as much to say their Father died of an Acute disease, as to confess he belonged to the lowest & Immoblest order of Society!!!

In the Simple State of Society, Morbid Stimulus produces its Morbid effects in the Bloodvessels, and causes a Morbid excitement there, or Fever.

In a more Polished State of Society, the same Stimulus will produce a Compound effect, on the Nervous, as well as the Arterial System, as in Palsy Apoplexy Gout & many others. Brit. Ad

But where Luxury & Effeminacy have advanced still further, these same Causes act still more powerfully on the Nerves, and produce Hysteria & Hypochondria: there depend on the last Stage of debility in the Nervous System, the following diseases Viz. Syncope, Asphixia, Marasmus & Tabes.

The truth of this position will be illustrated as we proceed. Melancholy depends on the first Stage of Debility. A Yeoman will probably be affected with this & Hysteria; he will be so excitable as to die at the Smell of the Rose, in "Aromatic pain". Here Customs will produce effects on people, further, as they are more or less exposed to these influence: The Rich Country Gentleman will be unable to make a meal with out Wine or Malt liquors, while the Citizen will be forced to use Ardent Spirits or Spirits of Wine. This great degree of Luxury or Effeminacy we are told, is is already making its appearance in Italy. Mr. . . . tells us of an Italian Marquis who is forced to keep himself alive during a walk by a Smelling bottle at his Nose.

I Shall begin then first with those States of Fever in which the Nerves & Arteries are both affected; and first of

Apoplexy.

Apoplexy is known by a Suspension of all

Voluntary motion; & sometimes Involuntary motion is very much impaired. It is attended for the most part with Sleep, with a Snoaring different from Natural, & the Sleep is sounder: it may be distinguished from Natural Sleep by coming on suddenly: sometimes as when the Patient is sitting in a Chair. It is attended with an Intermitting, preternaturally quick or Slow pulse. Where the Pulse is quick the disease is less dangerous. A foaming at the Mouth sometimes occurs: In these cases, especially if they are attended with a flushed face much danger is to be apprehended.

The Remote Causes of Apoplexy are, a painful & long protracted confined to one Subject where the Understanding & passions are much excited. Baglivi says Apoplexies were Epidemic in 1764. Rumsey was seized with Apoplexy from this Cause, in planning a Steam Boat to go against Wind & Tide. Emulation, as it is termed is a frequent cause of Apoplexy. The Remote Causes of Yellow fever, Plague & Small Pox are often the Remote Causes of Apoplexy. The exciting causes of Apoplectic State of fever, are sometimes combined with the Remote Causes. It is also excited by violent exercise of the whole body; by loud or long Speaking; this often excites the disease in Clergymen: Also

by a preternatural quantity of Azote in the Air, or by Mephitic air of any kind; hence its frequency in Crowded assemblies. Indigestion is a frequent exciting cause of apoplexy. I have known two cases of Death from this cause great heat; fumes of Lead or Mercury, have also excited the Disease. In some cases Contusions have been the exciting Cause. Montagne regrets the loss of a Brother from apoplexy excited by a blow of a ..... at Tennis balls. A violent exertion to discharge faeces has produced it in some cases. I have known two cases brot on them in a Necessary. In these cases the disease is brot, on without predisposing Debility. A Hemorrhage from the Nose; Piles, or Piles retained where they have been habitual, have excited the Disease Also Sudden suppression of other habitual discharges, the Sudden dispersion of a cutaneous Eruption; a Sudden healing of an old Sore or Obstinate Ulcer. Strong passions of the Mind have also excited Apoplexy; as Joy, Anger, Terror. I have before had occasion to mention 2 cases of Sudden Death from Violent Anger; from a full meal. Payton Randolph first President of the Continental Congress died of Apoplexy from this Cause; Supper more especially, is apt to produce this effect. Apoplexy is often incited from a neglect

of Bleeding when it has been necessary customary; &
from the cessation of Periodical Gout. Dr Gregory was dei-
ved with it from this cause. From taking ℥ of opium it was
induced in a Patient of . . . . . Lightening & Elec-
tricity have produced this disease. Eight Ligatures on any
part of the body, but especially on the Neck. Cure of
Malignant Headache, & the various exciting causes
of Malignant Fever, are the Exciting causes of Apoplexy.

The Proximate Cause of Apoplexy varies accord-
ing to the difference in the Remote & exciting causes.
In always pressure on the Brain; but in some cases
pressure is made by effused blood; in others merely
from Congestion. The pressure on the Pineal Gland &
Theca . . . . . is the Proximate cause.
Where the Pressure is made by Effusion, it is termed
Extravasation; When from distention of the Vessels
by Congestion, Intravasation. The former is always
Fatal; and in some cases the Excitement of the Brain.
is Suddenly destroyed, & no vestige of disease can be
perceived after on Dissection. These last described ca-
ses occur most commonly where the disease is caused
by a Sudden fit of Anger, Joy, by Lightening, Electricity
fumes of Lead, fixed & Azotic air; The Brain here is pro-
tected by the excessive power of these Stimuli below the point

Point of Reaction.

Dr Cullen has taken great pains to distinguish the Serous from the Sanguineous apoplexy, by Specific ~~Diag~~ Diagnostic Marks; but it is a Matter very difficult & of no importance, since it has no influence on the mode of cure; the Remedies being the same in either case. Dr Cullens Divisions of Apoplexy have moreover done immense mischief, by introducing a fatal practice, not to bleed in the Serous apoplexy. 'Tis as necessary as in the Sanguineous..

The Apoplectic State of Fever has been by some supposed necessarily fatal in the third attack: This is by no means the Case, some persons have had it a dozen of times before it proved fatal; this occurs most commonly in Drunkards; and on the other hand I have known the first fit prove fatal.

Apoplexy occurs most frequently in the decline of life; but I have Known Several cases occur in persons of middle age.

Before I proceed to mention the Remedies for Apoplexy, it will be proper to take notice of the Premonitory Symptoms: There are Giddiness, Drowsiness and Headache, Numbness in one or both the Lower extremities, a Snoring in Sleep (occasionally) bleeding from

the Nose, Tumors, Incubus, Long absence of Periodical Piles or Gout, dull vision or absence of Vision. . . . . — partial hearing or Deafness, pattering in Speech — loss of Memory, flushing of the Neck & face, Stouter Respiration than common; & Lastly an effusion from the Lungs & Skin of their customary Excretions.

Lecture 57th

Apoplexy Continued.

The Business of a Physician commences as soon as the Premonitory Symptoms make their appearance by gentle Purge, or the loss of a few ounces of blood, will restore the Patient to health, & prevent an attack of the Disease.

When we are not called thus early and the Patient is ill of a completely formed Apoplexy, the first thing we are to do is to clear the room of all unnecessary company or attendants, to prevent the air becoming foul by their Respiration. The next thing to be done is, to Loose all tight Ligatures from the Neck, & all parts of the body; the garters should be

be taken off, & even the Shoes & boots: The head of the Patient should be elevated by Pillows or if he is able he should sit up in a chair. While these steps are taking, the usual preparations should be made for abstract=ing the unduc pressure from the Brain by Bloodletting. the part from which the Blood is to be drawn or to be re=gulated by the circumstances of the case. If it can be con veniently extracted from the Carotids or Jugulars it will be preferable, especially in cases of Contusion; & here the bleeding should be Copious; but if this cannot be done blood must be taken from both arms, as much depends on the sudden abstraction of blood: But in some Chron=ic cases, the Method of Rivirius must be used, to take a few ounces, & frequently repeated: But where it is admissible, a great quantity must be abstracted, 90 or 100 ℥ may safely be taken away. Dr Physic drew from Dr Dewees between 90 & 100 ℥ at one bleeding. — Where bleeding is inadmissible, prepare on the Carotids must be used. Dr Barr of Bath used this method with great success. I have seen in this City great benefit de=rived from a Spoonful common Salt taken in the mouth, this induces a Temporary Salivation.

2dly Vomits. These are highly extolled by Dr Fath=ergill. They can only be used where the Disease proceeds

from any matter in the Stomach, as Poisons &c. Their exhibition is attended with great danger, unless previous bleeding has been used. When Emetics cannot readily be introduced into the Stomach, the readiest method of exciting vomiting is, by tickling the fauces with a feather.

3d Purges are highly proper; the bowels should be gently opened by Purges or Glysters, but if practicable both should be used.

4th When there is great heat & throbing in the head, Cold water & Ice should be applied to it, but, only under these Circumstances. They are Indicated more especially when the Brain is oppressed from Drunkenness. I recollect when a School Boy to have seen Drunken men relieved by pumping Cold water on their heads.

When these do not relieve, Stimulents must be applied, as Blisters to the Neck & back of the head. 2d Cataplasms of Mustard to the feet, of Mustard Garlic Onions &c &c. 3d The action of Cautery to the Crown of the head; this has often relieved Apoplexy. 4th Acrid Glysters. 5th Shocks of Electricity. 6th Heat. & Lastly Ether. Also, the Organs of the Senses should be highly stimulated, as the Eyes by Strong Light, the Ears by loud Noise & the Nose by Strong Odors, as Sal. volatile. Pain should be induced also by other means: there are many cases on Record where these Remedies have been used with Success. Fresh air must

must not be neglected.

Those persons who have once had the Disease are more predisposed to it than others: they are often seized with it after standing long on their feet (2 cases related). They should be careful to avoid the Remote Causes. They should eat temperately, & by, but by no means abstemiously; this Relates first, to the quantity, Second, to the Quality of the food. To avoid great Stimulus from the first cause, the Meals should be divided, & the Stomach Kept constantly & Moderately employed, but never quite empty. I have an hundred times witnessed the Disease coming from too little Stimulus in the Stomach. 2d The Quality should consist of Animal food of a gently Stimulating Kind, as the White Meats: but it should be accomodated to the weakness or vigor of the System. Wild is less Stimulating than Domestic Meat; Roasted more than Boiled;; Old animals more Stimulating than young; Veal & Lamb less so than Beef & Mutton: But Poultry will be preferable in most cases; Vegetables exclusively should be avoided. Soft Cheese is very bad diet for persons thus predisposed. The frequent occurrence of the disease about Christmas, is owing to the change in food by introducing that Farinaceous & Dietetic Mince Pies!

The Stomach is a strange viscus; long ago

remarked it Dietetics, & shy of new acquaintances.
It even refuses to admit its usual acquaintances fruits
& vegetables at first; Cucumbers, Radishes & Melons
frequently produce Diseases when first Eat. After the
40th Year it seldom allows a change of diet with impu-
nity; for this reason Valetudinarians should be
cautious what they eat especially in Apoplexy; hence
too they should never depart from their customary food to
prevent any inconvenience from this cause in old age.
I adopt the opinion of Celsus, that in Youth, and
persons engaged in business, "the best habit is no habit." they
should not eat any particular food exclusively, nor
form any habits, to prevent ill effects from breaking
them. The Drink of persons predisposed to apoplexy
should be gently stimulent. Madeira Wine & water
answers very well; Punch is a very agreeable Drink.
The Acid & Low Wines should be carefully avoided.
Malt Liquors too answer very well for such as drink,
but not for others. When Giddiness is customary, the
habitual use of Garlic & Onions is an excellent Remedy
it acts gently very subtly on the Arterial System and
gently stimulates the Alimentary Canal; but it
principally affects the Brain & Nerves. —

2dly Exercise should be used as a Prophylactic

Remedy in Apoplexy; it should be gentle, & fatigue carefully avoided: Moderate walking or riding answer very well, but Gestation should be prefered. 3d. Issues & Setons are excellent preventatives; Van Swieten speaks very highly of them. 4th. Avoiding all the occasional Causes of it as Violent Exercise, Intense Study, Tight Ligatures, Returne of Piles should be promoted when they have disappeared, old Issues & Sores should be prevented healing, & if they do heal should be renewed again; if bleeding Piles disappear Bloodletting must be substituted. The Patient should lie on a hard Bed or Mattrass, & carefully avoid feet, here excitement is unequal, & is determined to the Brain. Persons predisposed to it should not sleep on their Backs: The Night Mare (Incubus) occurs most frequently in this position, of the body, & this is a tendency to Apoplexy. Lastly great care must be taken to promote healthy discharges; even the filthy custom of Smoking & Chewing Tobacco, when habitual, (which are none or less depleting,) should by no means be laid aside. Cases have occured of Apoplexy having been brought on by leaving off these practices.

Catalepsy occurs from an obstruction to the circulation of the Blood thro the Brain, & a consequent Congestion. It sometimes comes on in paroxysms of a Quarter. It proceeds from the same causes as Apoplexy; and also some cases from unsuccessful Love.

The Remedies are the same as for the premonitory of Apoplexy, of which it is an Inferior degree.

Palsy. Proceeds from the same Remote & Exciting causes as Apoplexy. It has also the same Premonitory Symptoms. I knew one case in which a loss of Memory how to Spell words, was one of the Premonitories, & then was no other.

Sometimes the Muscles & Nerves of one side only are affected. Here it is called Hemiplegia. Where the lower Extremities only are affected, it is called Paraplegia. Paraplegia is frequently a Symptom of other diseases; it occurs in Cholic, Small pox, Yellow Fever &c.

In all cases where there is an inability to move the lower Extremities, the Bowels are affected: They are not connected with the Brain; they also proceed on a loss of excitement in the Limbs, Muscular fibres and Nerves, tho' they retain their Sensibility to pain &c. The Vapours of Lead act in this way. Dr Franklin

was seized with Palsy of his hand, from warming the Tongs he used before he worked with them. This same State of the Limbs occurs in some cases after a half cured Rheumatism & Rheumatalgia. Indeed the order in which the disease appears proceeds, appears to be — from acute Rheumatism to Chronic, or from Rheumatismus, to Rheumaticula, next to Rheumatalgia, & then lap of motion in the part. In Hemiplegia it has long been observed that, the Pulse on the opposite side is quicker & more tense than the other. All persons are subject to it from 10 to 50 years of age. In some cases I have observed pain to be more acute in the Sound than the opposite side. Lastly, I have known one case where a Sore mouth came on & was a fatal Symptom.

The Remedies for Palsy when the Brain is affected are, in the first place Bloodletting; this may be carried from 20 to 150 ℥. I once took this much in 10 days with the happiest effects. It is, I grant, often unsuccessful, but then it proceeds from being used in too sparing a quantity. 2dly Purges, these are very proper, Aloes are to be preferred. 3dly Blisters to the head & Neck. 4thly Emetics, these are very useful when the exciting cause is in the Stomach.

this must Regulate our prescription of Emetics. 5th The warm Bath: the heat here must be below the Temperature of the Patients body. Accordeing to Dr Falkner the Water at Bath was at 96°, & did more good in this disease than when it was at 105°. This he justly ascribes to the increase of Sensibility. 96° felt warmer to a man in health with Palsy, than 150° to a man in health. 6th The Cold bath: After the use of the warm bath, the Cold may be substituted with advantage. As 7th Remedy is Blisters, Seton or Issue; when this disease is Chronic they should never be neglected. 8th A Salivation must be excited. I have used it with great Success in 3 or 4 Cases; where one is insufficient, it is to be repeated. 9th A Sudden excitement of the Passions has cured the disease where it occured in the Tongue: A Case of this is recited in the Son of Croesus: he was dumb & from this cause, & was cured by Terror. A Man was a going to Kill his father Croesus before his Eyes; he rose up & exclaimed — "Oh! Man dont Kill Croesus"! & ever after retained the use of his Speech. Terror from the cry of fire & the fear of being burned has Cured the Palsy. Anger often has the same effect, it often makes people speak who could not before from Paralasis. 10th Stimulants

may be applied to divert action from the Brain. The Rachi Byrethsi (pellitory of the walls) has been used for this purpose with great success; it acts as a Sialagogue. 11th Diembrake relates the case of a person cured of it by means of Lightning, which was of 38 years Standing. Electrical Shocks answer the same good purpose: These facts shew the effects of Stimulants, but these applications shew the operator require great Care & Judgment. The favorable Signs are the prickling Sensations of the Arms & Limbs, if this takes place, we may presume the Brain & Nerves to be operated; we may further presume this to be the Speech is operated, & a favourable Symtom is, its restoration In this disease there are great Changes, patients sometimes better, sometimes worse. Those Symtoms which favour a supposion that no Relapse will ensue are, a perfect enjoyment of the Mental faculties & Speech.

Where the Brain is not effected, but only the Muscles, as is known by the perfect enjoyment of the mental faculties, the presumption is, that the Muscles only are effected.

The Remedies are External & Internal. The natural Stimuli as drink & diet, should be increased in force, also vol. Tinct of Gum Guiacum, Horse Radish &c. But great care must be taken never to administer

these with a tense Pulse; They act on the Arterial System. The External Stimuli are Warmth, either in the mechanic of Water, Spirit, or Salt; by the warm Bath; Salt bath or by being wrapped up with Clothes wet with warm Spirits The Suda Torie, as they are called, used in Italy would probably be useful here in these Cases. 2da Frictions with the hand are useful if the Pulse bears it. The Muscles like the Tympanum in the Ear, will sometimes vibrate only with certain impressions of Stimuli; We should be careful therefore to accommodate the force of Stimulating friction to the State of the System. Empyreumatic oils & Sal Ammoniac may be used, also equal parts of Ether & Tinct. of Cantharides are a good application; also Cayenn Pepper & Rum, & other Rubefacients of moderate Stimulus. 6th The Cold Bath. 7th Electricity, & lastly the Cold Bath a Salivation; but great care must be taken to accommodate all the above remedies to the State of the System

The Prophylaxis is the same for Palsy as for Apoplexy.

Another affection of the Brain & arterial System is,

Wakefulness.

This depends on Morbid excitement in the Brain. The Remedies for it are to be accommodated to the

the State of the System. This was the disease of the Celebra=ted Rohean for the last 4 or 5 years of his life.

The first Remedy is Bloodletting if the Pulse Indi=cates it; Next Purges: after the Reduction of the System by this means, a Stimulus should be recommended of Oysters, Porter &c &c. Also Opium, or Asa foetida; I have known the last succeed when Opium would not indeed Sleep. This disease is called by some Crivil, & by Corruption the Cruels. Dr Bond called it the Figets. Cold Bath have a most wonderful Influence in keeping people awake the exertionment of the System should be equalized by keeping them warm. A thinking on an unenteres=ting Subject, will sometimes put one to Sleep. Also walking over or twice across the bed room. Sitting up in bed &c will sometimes have the effect, as also counting a hundred backwards.

Lecture 58th

Headache, is the next disease appearing conjointly the Nervous & Arterial Systems.

We hear of the Nervous Headache; I have never

never known a case in which the Arteries were not more or less affected. If they do not indicate Morbid action at the Wrist, the Temporal Arteries are certainly affected.

A great variety obtains with respect to the Seat & Nature of the pain in Headache.

In the first place we find it affect the whole head. 2dly It affects, sometimes, only the Forhead or the Occiput. 3dly It covers over each Orbit, or over one Orbit. 4th In some cases the Pain is dull & Stupefying: or 5th It is extremely acute and constant. 6th It has remissions & exacerbations. 7th It is attended with a Sensation resembling in the Patients mind the Opening & Shutting of the Cranium at the Sutures. 8th The Scalp is sore to the Touch.

In all cases it is attended more or less with Cold feet. The Morbid excitement being accumulated in the Head, we would, as a matter of course, expect this to take place. (cold feet.)

In the worst cases of Headache, the Eye lids inflame. In many cases the excitability of the Retina is so increased, that the Patients are unable to bear the least light in the Room.

In one Case, a Shock of fire brot in to warm the Room, produced a severe pain & Head ache, which continued, from the light it Emitted, till it was carried out. Other Symtoms sometimes occur. The Sense of Smell & Touch are unpaired, also the faculties of the Mind especially Memory & Imagination. The Operations are sometimes disputed, as the Judgment, is unpaired. Other Symtomes, are Giddiness, Vomiting, Pale Urine occasionally; a fit of it lasts from 6, to 42 hours; and generally goes off with a Stupor or Sleep. It affects young People more than old, & lasts till middle life. I have known it last till after 40, & Ceased when the Ships between the nervous & Arterial Systems subsided. It is generally periodical, & here it varies as to its intervals. It occurs daily. I often have it come with the rising & Depart with the Setting; here it is probably excited by the Stimulus of Light. Sometimes it comes on weekly, & often Monthly. I have known its Intervals continue for a Year: In this case which was in a Lady, it attacked in September, & was cured by Emigration, as it probably depended on Climate.

It occurs at all Seasons, but more particularly in the Spring. Dr Cullen long ago observed that

that 10 women were affected with it to where one man, In them I believe it is a Symtom of Gout.

This very distressing Disease terminates in Apoplexy, Palsy, Loss of Memory, Detestation, Hydrocephalus Internus, Deafness, & Loss of Sight; But now & then there is an exception to all the above. In many cases there are no Intermissions. I Knew a Gentleman considerably advanced in Life, who assured me that for the Last 40 years he had not had an Interval of ease from the most distressing headache.

The Causes which induce this Disease are, in the first place Malconformation of the head. This I suspect to be the Case in all those cases where the Disease is Hereditary: This is probably the reason why it occurs so early in life. 2d In fever, in all Intermittents it occurs; and often in the Arthritic & Rheumatic States. 3d From diseases or disorders of the Stomach, which often produce this Disease. 4th From intemperance in Eating & Drinking: And from a Peculiar Idiosyncrasy. It is sometimes produced from certain articles of Diet. In some headache is produced from a Dinner of fish, in others from Coffee, Butter, fat Meat, &c. & many people from Idiosyncrasy cannot eat a mixed diet of fish & Flesh without experiencing it, while they

could eat either by it self with Impunity: Again it is sometimes produced by abstinence; also unusual — Sleep; & Sleep at an unusual hour; — An obstruction of Menses; Great heat, & Great Cold: The Stage between the Venous & Arterial System, hence it occurs between the age of 36 & 40 or 46: this is a very frequent Cause.. A certain State of the air as it regards a greater or less portion of Electricity. I once knew a Lady who — could foretell the approach of a Thunder Storm by a head — ache which occured from this Cause. An Abscess of Matter in the Ear, & Frontal Sinuses. There is a Case related in the Transactions of the College of Physicians, where obstinate headache was produced by a Rose Bug in the Frontal Sinus —. I have known an Abscess in the Frontal Sinus, produced by the Influenza, which caused a most severe & obstinate headache; Also Abscesses in the Lungs I Knew a Case of severe headache which at last ended with the life of the Patient, (a young Lady) where no — marks of disease appeared in the head, & where the Lungs were much diseased, one of them having a — large abscess containing near a pint of Matter. Lastly, from a passion of wearing tight dresses of any kind on the head; when Cushions were in —

passion, Headache from this cause, was a common occurrence.

The Exciting Causes are, Intense Study, Certain Winds, Certain odors, & Many other Stimuli.

Are there any Premonitory Symptoms of the Disease? Yes, there are. The disease is preceded by Preternaturally Cold feet, & dry feet; uncommon Sleepiness or uncommon Wakefulness, this last is frequently a Troublesome Symptom throughout the disease; by a Sense of Weight in the Head, & Sense of Coldness; by a Brittle texture taking place in the Hair. This precedes Several other diseases, especially in Children; By a great Increase, or Great diminution of Appetite. It may be here said, the increased Appetite is indulged, & is the Cause of the disease, but it occurs whether the Appetite be Indulged or restrained.

When from any or all the Symptoms above enumerated, we anticipate the approach of Headache, it may be obviated, 1st By abstinence from food. 2d Vomits are proper. 3d Purges will sometimes, when the disease is in the forming State. 4th Sweating will often obviate the approach of Headache: Once Lastly a dose of Liquid Laudanum, or a Glass or two of Madeira Wine. I have seen both the Last used

with great Success. In a Lady in whom the Disease appeared in the form I mentioned of the opening & Shutting of the Sutures, a dose of Laudanum, from 10 to 30 drops, would effectually abviate an approaching fit. By abviateing a fit for several times she stood a chance of performing a Radical cure, by breaking off the habit of diseased association, as we see in curing Intermittents.

The Cure of the Headache, naturally divides it Self into two parts: The 1st to Cure the Fit: & the 2d to prevent their return & produce a Radical Cure.

During the Paroxysms, the first Remedy is Bloodletting: This must be used if the Pulse be full or tense, in this disease, as in other affections of the Head. The Pulse is sometimes Natural; & here Mr Hunters Rule must be adhered to Viz. to be governed in your prescriptions of Bloodletting by other Symptoms, whenever, therefore the pain is violent, we are to bleed. 2d Purging. 3d A Blister is to be applied to the back of the Ear, or Neck. 4th A Cataplasm to the feet, as Garlic, Onions, Mustard &c. Rest, Silence, & Recumbent posture of the body; Darkness, & Cooled applications to the Head & Neck; Also Ether confined in a Bladder

& applied to the Scalp; or by a piece of Sow wet with it. Errhines may also be used, but they require to be used with Caution. Moderate fear as a Sedative has often been of Service in relieving Headache. There have been disputes about the propriety of administering Cometics in a fit of Head ache: Where it is feeble, they may be used, and when the disease is supposed to proceed from Bilious complaints in the Stomach, they are certainly useful; In the forming State they are always to be used. Where Morbid Action is reduced by these Means, & in a fit of the Headache — with weak morbid action, the following Remedies are to be prescribed;— Opium; it is to be used here in Stronger doses than when it is used for abviating an fit approaching fit: Wine, & warm applications to the head; — particularly by Steams of Vinegar by pouring it on a hot brick, & exposing the patients head to the fumes the most propure Succothing is then exuded on the head. In Regard to food & the time of eating is of great use: — Asafoetida & Pediluvium; if these fail Blisters to the head, behind the Ears; Setons are unprosperous, they do not stimulate, in a general way sufficiently. —

The Radical Remedies are to be used during the Retrocession or Interval of the Fit.

They are first, avoiding all known & exciting

Causes. 2d. The use of Tonics both Vegetable & Metallic;
the first are Gum Fetida, Bark &c. the Bark is of great
use; the Metalic are Zinc, Arsenic in the dose of ½ to ¾ a
grain, & the Vitriols; the Cold Bath is a useful Tonic,
exposure also, of the head to Cold air. An old French
Bishop who had been long subject to the headache,
was cured by leaving off a Woolen Night Cap in his
Bed, & exposing his head to the Cold air; he was near 80.
A return to old habits must be attended to, as Smoak-
ing, Snuffing &c. even Chewing: Many people have thus
Cured the disease when brot on by leaving off these
Customs. An Issue should be excited if the disease
comes on from the healing up of one, or the Sudden dry-
ing up of an old Ulcer; or if an Eruption is Suddenly
dried it must be excited again. An Issue in the
arm has moreover, cured the Disease, when not
brot on by in that way.

I forgot, when Speaking of Tonics, to mention the
use of Pepper: This Have Known cure the Headache.
It was discovered by accident. A Person eating a
high Seasoned Pye, experienced a Relief from
his customary headache; & afterward Relieved it by
Eating Pepper. Exercise Should be used to fortify
the System against the Causes. Lastly, Occasional Bleeding.

The most obscure of a Compound nature, where the Nervous & Arterial Systems are effected, is,

Epilepsy. A Convulsion of the Muscles of the body, accompanied with, & occurring principally in Sleep.

Johannes Acta, the Great man of the age in which he lived, & Physician to 3 Successive Emperors, earnestly desired that he might live to hear a Satisfactory of the discovery of a Satisfactory & Cure of Epilepsy. He lived to a good old Age, & died bitterly being disappointed, in this Philanthropic wish; & had he lived to the present time, he would be made no happier in this respect. I have Read & thought much on this disease, but am sorry to say, that I know now, but little more of it than I did 30 years ago. All attempts hitherto to made, to remedy this deplorable disease, have been unattended with Success: I have merely a detail of facts to offer; perhaps, at some future day, at some luckier moment, one of you may combine & arrange these facts into a Satisfactory Theory of the Disease.

Dies Docebit. Time, I make no doubt will remove the hidden Mistery which Envelopes this obscure subject.

Debility is Certainly the Predisposing Cause of

Epilepsy. The Reason perhaps, why the Nature of this disease is connected with so much obstinacy is, that this debility is so General, & affects not only the Nerves, but Muscles & Bloodvessels, imparting of course to each a large proportion of Morbid Excitability; This has been termed by Cullen, when it is thus General, Mo=bility. When it affects both Arterial & Nervous Systems.

The Remote causes of Epilepsy are General & Local. Most commonly Local, General. Among the Local, the principal are the fractures of the Scull; Malconforma=tion; Effusion of pus, Water, or blood in the Brain, & Calculus & Worms in the Brain: Not only Local affec=tions of the Brain, but also of Other parts are capable of predisposing to Epilepsy; thus Tumors in any part of the Body may prove a Remote Cause. I heard of an instance where a Tumor in the Calf of the Leg was the Remote Cause; & Dr Physic informed me of a case of Epilepsy produced by a tumor in the ball of the Thumb, which was cured by extraction of the Tumor.

The General Causes are such as affect the Whole System. 1st. Great exercise of the body. 2d. Immode=rate use of the Under Standing. 3d. Violent Passions suddenly excited, as fear: I have Known & heard of three cases of Epilepsy brot on by fear. 2 happened at the

Edinburgh Infirmary, & one in this City, from madness
fright in a boy of 14, at General Arnolds Execution
some frightful figures carried about the streets after
his Execution. 4th Great Intemperance in Eating &
Drinking, & excessive Indulgence in the Venereal ap-
petite, especially in Onanism. The late King of
Prussia died of Epilepsy brought on by the excessive
indulgence of his Venereal appetite for Women.
5th It has occured in Several cases in Consequence of
Repelled Eruption. Sleeping in the open air has
been known to induce it; It has been brought on in a
Medical Student by Sleeping in a Piazza in N.
Carolina.

All these Remote Causes act by inducing De-
bility, & a great accumulation of Morbid Excitability
Convulsions are induced by the slightest cause
acting on the immense accumulation of excita-
bility. Dr Cullen mentions a Case where it was
excited by the Noise of horses feet far off. The Sound
of a distant bell has induced it. These causes induce
a return of the fit after the disease is completely formed.

Association has now a most powerful influence
on this disease: Many cases of it are reproduced & or
excited only by a repetition of the Causes which first

produced it. (Case of a Soldier in whom it was induced by Terror while he was drinking out of a Mug; the sight of a Mug ever after, reproduced an Epileptic fit.) In some Cases a Dog has been the object which excited it. Dr Cullen relates a Case of a Lady seized with Vomiting while a Mantua Maker was fitting on a Gown; whenever She saw the Mantuamaker afterwards, or saw the Gown, the same affection was reproduced. (This Lady was Pregnant at that time, & the fits did not occur after her delivery.)

Are there any Premonitory Symptoms of Epilepsy? Yes there are, & it is of the greatest consequence to attend to them. In the first place it is preceded with a bitter taste in the mouth for 2 or 3 days previous to the attack. 2dly By a preternatural dilatation of the Pupil. 3dly False vision. 4thly A Stone, & 5thly A Quick Pulse, & Sense. (Morgani notices the first.) 6thly By a pain over the right Eye, and in some cases, an Inflamation, Pain & Redness of the Tunica Adnata (Cullen). Headache often precedes it. And a peculiar smell of the Breath for 2 or 3 days previous to the accession of a fit; of this, I have known a Remarkable Instance. Lastly a Terror or distress (expectation of Evil) generally precedes it.

The Remedies in this forming State are, a Vomit, if the Bitter Taste proceeds this, purges must be used. When Headache, quick pulse & other Symptoms indicating V. S. are present, Bloodletting must be performed, & abstinence observed: But in a Contrary State of System, Opinion must be had, this I have known suspend it. The Smell of Sulpher has prevented a fit of Epilepsy; and hence perhaps Sulpher is the best Purge when convulsions attend. I wish Gentlemen, these loose uncommented facts respecting the Cure of the disease in its forming State, to be attended to; they will prevent the necessity for any other.

Before I proceed to mention the Radical Remedies for this disease, I will mention the effectual Cures that have been accidentally performed. 1st By Puberty; this has often Cured. 2d of Child bearing; of this I have known one Instance, in that, the disease was suspended during Gestation, but returned after delivery. 3d Old age has cured the Epilepsy. In one Instance I have known it cured at 50. It is true Painty fits succeeded the Epilepsy, but they were of little inconvenience compared with the former. In another Case old age had not the effect, & the Patient continued with them till near 100 years of age.

Lastly Change of Climate has cured Epilepsy. It has also been cured by a full Diet, where it has been produced by Abstinence.

These facts Suggest the propriety of Tonics in this disease; for in this way all the above causes act by invigorating the System, even old age acts in this manner. Let us now apply these facts to the Cure:

Cure. In all Young persons where it is a Symptom it is attended with Plethora: Bloodletting Should of course be used. It acts in two ways, not only by depletion, but 2dly by rendering the System more liable to be acted on by Tonics: The Blood of persons drawn in Syzy; this Authorizes the Prescription: even Dr Brown himself bled in this disease. 2dly Milk & Vegetable diet; Dr Cheyne Relates a case of a Taylor who was cured by this Remedy. 3dly Occasional Purgency Should be used; After Plethora is Removed by these means, Vegetable & Metalic Tonics may be used as Muriatic, Bark, Opium. 2dly Steel Wine, White Blue, Green Vitriol, Cuprum Ammoniacum, & I have lately heard of the Succesful of Magistery of Bismuth dissolved in Aqua Fortis: Lastly Salts. Saturni. I have Cured three with great Success. I Suspended the fits in 2 Patients for a Long time

by using 2 grains of Sugar of Lead 3 times a day for 3 or 4 Months, during which time they were well, but returned after that time. Among Vegetable Tonics I forgot to place Stramonium (Datura.) It has been used with great success by Dr Archer, he informed me he cured 2 cases by it. I relieved a Boy with it in the Penn.a Hospital in '96.–'97. He was discharged — Cured, but returned again; the same in whom Sar. Sect. was used. Issues & Setons have done good, these are especially proper if it has been caused by drying up an old Sore, or if it has proceeded from the Flesh. The Actual Cautery has been used along the Sutures with advantage. 4th Ligatures around the Limbs, to prevent the rising of the Aura Epilep-tica: this has performed Cures. 5th Glysters of Tobacco Haller says have cured the Disease. 6th On Misperm impression from all causes, Natural Stimuli, in Diet, Clothing, Drink, Sleep &c. The Diet should be well to be Masticated & Insalivated. 7th Change of Cli-mate has cured the disease, by destroying diseased associations, especially if the Climate be Equable to which they migrate. 8th By hard Labour. Julius Cæsar was affected with Epilepsy, but never experi-enced while exposed to the hardships of a Military Life.

Long Journies are also useful. Sea has cured the Epilepsy. Dr Cullen Cured a Girl in Edinburgh Infirmary, by fearing her very much: he told her the pits were feigned, & threatened to burn her with a Red-hot Poker, if he found her in another; the consequence was that she had none for Several days. Salivation.— This is the only radical Remedy I have found. Haller relates Cases cured by it. Dr Hugh Smith Salivation then of London, Relates the Success of this Practice, & from him I believe it. I have cured it in 4 Patients, 2 of whom were quite cured; in the disease was Suspended during the Salivation, & in one it returned — after a Considerable time. I shall only here add that it is very difficult to excite a Salivation in this disease.

Lecture 59th

The next Disease affecting both the Nervous & Arterial Systems is, the

Hysteria. This appears to be confined principally to the Nervous System: The Arterial is generally

somewhat affected, & also the Alimentary Canal.

I know of no difference between Hysteria and Gout. They are produced by the same Remote, Predisposing & Exciting Causes. There is no more occasion why Morbid action in the Nerves should be called by different Names, than that Fever should, as this affects different parts of the body.

I formerly remarked that Women are more subject to Gout than Men: So they are to Hysteria, In Men Gout appears of the firm texture of Broad cloth; in Women 'tis slender as Muslin. In conformity however, to Custom, I shall adopt the Term Hysteria.

Its Symtoms are, a Rumbling noise in the belly; a Sense of a Ball rising from the Stomach & Throat, called Globus Hystericus; Sleepiness; Convulsion; Coldness down the Back & Head; Pale Urine, & great discharge of it: There is moreover, a great affection of the Mind, which is very inconstant: According to Dr Sydenham the Mind is Constant only in Inconstancy. It is also affected with Despondency, frightful Dreams &c. It is remarkable that the Bowels sympathise with the other Remote Causes of Hysteria. Hence the Stomach

ance Alimentary Canal have a Sensation of Coldness.

Hysteria occurs in form of every disease to which the body is Susceptible. It has been properly termed the Proteus of Diseases; Resembling all Chronic Diseases, as . . . . . .

. . Palpitation of the Heart, Cholera Morbus, Dys=entery . . . . . .

. . . . . .

It frequently is attended with Swelling of the Legs: There may be distinguished from the Drop=sical Swellings, by their disappearing soon after the Patient Rises; they only occur in the Morning: Legs & Face especially; the Eyelids are affected with a kind of Habitus. It is attended sometimes with Ischuria & in one Case with Salivation; Pain in the Limbs, Headache, Coldness of the Extremities, Clavus Hysteri=cus, or Sense of a Spot on the head: Besides these Symtoms it is attended with great Excitability of the Mind to any of the Passions which are of short duration. Anger, Love, Jealousy, &c. readily are soon excited, but soon subside. It is attended also with ob=stinate Wakefulness, or the contrary. It is likewise attended with great disposition to Laughter & Crying. Sobbing. The disposition to Laugh is the most

constant of these Symptoms: It is seldom absent from Hysterical Patients. The Reverend Mr Dasher, formerly of this City, would with difficulty refrain from Laughter, even in the Pulpit. For a complete History of the Disease, I refer you to Dr Cullen's History of its Paroxysms.

It attacks Women more than Men: seldom before Puberty, or after 35 or 45 years of age; tho Cases have occured of its attacking Children & old People. I have known it in a Child of 2 years old, & in a Girl of 6. It continues sometimes from 45 to 55, or till the Menses begin to Cease. It is not confined to Women of delicate Habits of body. It now & then occurs in Women of Masculine Constitutions.

The Predisposing Cause is Debility.

The Remote Causes are such as act on the Body or Mind, or both. The Fluor Albus, Strong Venereal Desires; Strong drinks, especially Tea, since its frequent occurence in Kitchen Maids, who are addicted to Excess in the use of this Article; Absence of the Menses.

The Remote Causes which act on the Mind are the Passions of the Mind, as Malice, Envy, Love, Grief, Fear, &c.

The Exciting Causes are such also as act on the Body & Mind, as certain Odors, impure Air, &c. Those which act on the Mind are, the Emotions of Terror, Joy, Anger, Surprise. The Passions are Remote, Emotions Exciting Causes. Thus, Remote Causes, produce great Debility or Mobility of the Nervous System, or by Creating a great Quantity of Excitabe floating Excitability in the System, which is converted by the Exciting Causes, in to Excitement.

Great Controversies among Physicians have arisen concerning the distinction between Hysteria & Hypochondriasis; these are easily distinguished. In the former, there is a greater degree of irritability of Mind; Whereas, in Hypochondriasis there is Constant distress of Mind. 2d. There is a greater degree of Excitability in the Mind in Hysteria. 3d. Hysteria occurs most in Summer & Hypochondriasis in the Winter. 4th. Hysteria affects Women more than Men; the Reverse of this obtains in Hypochondriasis. 5th. Globus Hystericus occurs in the former; never in the latter. — Lastly, the absence of Dispepsia, attends in Hysteria, which always occurs in Hypochondriasis, is sufficient to distinguish this from Hysteria. In short, Hypochondriasis is to Hysteria, what Syphus is to

Fever with Synocha Action.

The Cure of Hysteria naturally divides itself into two parts or heads: The one to Cure a Paroxysm. The other to prevent the Recurrence in Patients predisposed to it.

The first Remedy in a Paroxysm attended with Plethora is, Bloodletting: This Should always be used if the disease proceeds from obstructed Catamenia. Patients Should Never be neglected in a Paroxysm, since it often terminates fatally. 2d Opening the Bowels by Stimulating Glysters, for Purges, cannot be exhibited as the Patient is unable to Swallow. 3d Certain Stimulating odors which act on the Brain, as burnt Feathers, Asafoetida &c. I have heard of a Country Practitioner Near Boston who cured a Patient by presenting to her Nose, (in Summer) his foot very warm from his boot. The Stench from it acted more powerfully than all the other Medicines which had been tried in vain. 4th Pediluvium has been used with Success in a fit of Hysteria. 5th Cataplasms of Mustard & Garlic to the feet. Where Syncope attends a fit of Hysteria, Cold water Should be thrown in the Patients face. A Symptom which often occurs, & Should be relieved if possible is, a Collection of Air in the Bowels.

This should be discharged by Introducing a Glyster-pipe into the Anus. In one Case the Retrograde action of the Intestines was such, as, aided by the Contraction of the Sphincter Ani, broke the Glyster pipe in two. Opium may be substituted with advantage. I have used flower of Water in some Cases with good effect. It only gives the Stomach something to act upon, & thus prevents, in some degree, the collection of Air.

The Second Class of Remedies Viz. Such as are exhibited to prevent the Return of a Paroxysm, are of a Tonic Nature. The first of these is, the cold Bath; this is often used with great advantage in Hysterical Constitutions, according to D..... a French writer; the Water should be applied a much longer time than is usually done; he says by keeping the Patient immersed in cold water for the Space of 20 hours, he destroyed the Mobility of the Nervous System predisposing to this disease. 2da Certain Gums, suspected of Tonic Qualities as Asafoetida,. ..... Galbanum, Mirrh &c. 3a Certain Metallic Tonics, as Steel in large doses, Cuprum Ammoniacum has been used by Dr Cullen with advantage Zinc & Asafoetida combined; the former in the dose of 2 grains, the latter 3 grains thrice a day. I have

known this of Great use during the Hysterics / They are much more
useful here than in Epilepsy, as in this disease there is less Mor=
bid action.) 4th Certain Stimulant applications to the
abdomen; a Plaster of Galbanum, I have known used
with advantage. 5th Certain Compress bandages. Dun
friction relates Cases of Hysteria cured by the light
application of the Roller all over the body & Limbs of
the Patient. I once tried it on a Girl of 19 or 20 with
great advantage. 6th An accommodation of Diet
to the State of the System should be attended to. It
ought to consist of Stimulating food, but such as
will not render plethoric by too much Nourishment.
7th Exercise especially Riding on Horseback. 8th
The constant pursuit of some Invigorating occupa=
tion, as of Gardening. Women predisposed to Hyp=
teria, should have their Minds employed in gathering
Seeds from different parts of the world; or else, should
have their attention taken up with the care of a fami=
ily. I have seldom known a good housewife opposed
with Hysteria. It is often only Ideal, & then unless the
mind be occupied, the Patient is never well. A Lady
in affluent circumstances was constantly affected
with Hysterical Complaints: a female friend, whom
she asked how to cure herself, answered very —

Judiciously. "Fall down on your knees & pray fervently to the Almighty to send you some Real Trouble, and this will banish all your Real Complaints. 9th. Some Steady Passion of the Mind; Grief & Distress have often Cured it; this it does by fixing the Mind constantly on the object that excited it, & thus tends to remove the Irritability Weakness & Mobility Spoken of. Those Known the Death of a favorite Child, perfectly eradicate this disease in a fond Mother. Dr Cullen has remarked that in Scotland no Women were affected with Hysteria in 1745; this year was attended with great Trouble & Calamity over all that Land, owing to public disquietudes, (Rebellion &c.) and the Minds of all the Women were taken up with Husbands or Brothers fates. Wilkins Relates the Case of a Wife of an Apothecary in London, perfectly Cured by impressing the Religious opinions of the Methodists: the Principles, obligations & duties necessary in her new Situation, engaged her whole Mind. 10th Change of Climate. 11th Matrimony frequently Eradicates Hysteria, especially if it be attended with Child bearing.

The next Disease under this Genus head (Nervous & Arterial.) is the

Asthma. A difficulty of breathing coming on, with Spasm of the Muscles of Respiration & attended with an Expectoration more or less copious; distinguished from Dyspnoea, & Pneumony, by not being attended with fever or Cough (Cullen). —

Its Predisposing Cause is Debility, which is sometimes Hereditary, depending on a peculiar conformation of the Lungs or Thorax. It often proceeds from Gout. It seldom continues longer than 30 years: But Sir John Floyer relates that it sometimes continues during the whole course of the longest Life. It generally commences about 30, & continues till the Evening of Life.

The Usual Exciting Causes are, great heat after exposure to Cold, or Cold succeeding heat. Certain kinds more or less dry or moist; Certain Corpuscles of the Mind; Repelled Eruptions; Certain odors; Pregnancy, in Women it is frequently excited by the pressure of the Uterus upon the Diaphragm: Certain Indigestible Substances in the Stomach, in one case I knew it excited by Buck-wheat Cakes, & by Wafers.

Asthma Comes on in 2 forms, either the Spasmodic, or Pituitous. In the former there

is but little discharge from the Trachea; in the latter a very great discharge: The seat is the Bronchial Vessels, & its most usual action is in form of Spasm.

In the Spasmodic Asthma there is most Cough, it occurs in Early Life. The Humoral or Pituitous occurs in Old Age.

Are there any Precursors to Asthma? Yes. They are, Lassitude, Uneasiness about the Breast, Drowsiness, especially after Dinner, Cold feet, and a Dyspnoea at Night; here it may be prevented by the Pediluvium, a Purge, or dose of Laudanum &c. or Bloodletting according to circumstances or the degree of Morbid action.

The Cure of Asthma devides it self into 2 parts. First the Cure of the Paroxysm, 2dly the prevention of its recurrence. The 1st Remedy in the Paroxysm of Asthma is Bloodletting. This must always be used if the Pulse is full or strong. But it sometimes happens that the Arteries are not affected, & here Bloodletting is equally necessary, tho' not indicated by any Signs of Morbid action in the Pulse. It is to be used then if Pain ensues, tho' the Pulse be regular. Mr Pope says he was much troubled with this disease

during the latter part of his Life, & was indebted for relief to the occasional use of the Lancet. I Remember an old man of the age of 60, by the name of — Robert Porter, who used to pass his Life tolerably easy by the use of Bloodletting in the fits of his Asthma. It continued to the End of his Life, 15 or 16 years after its first attack, & each fit was thus relieved. Bloodletting, acts in this case first by preventing those obstructions of the Bronchiae which sometimes lay the foundation for Tubercles & Pulmonary Consumption. Second, by giving relief to pain. — 2dly Vomits are prosper by exciting action in the joining parts. Squills are commonly used, but I prefer other Emetics, as they act with more certainty & force: Ipecac. is the best Emetic. 3dly Purges, these are to be given if Bloodletting & vomits are not allowed, & when Costiveness attends, where the disease is attended with great Morbid action. Cold air, Cold Water & Cold drinks are to be had recourse to. Sir John Floyer after reducing the system in their Morbid action in this way, properly recommends Liquid Laudanum. This should be given in small & frequent doses. The warm water is to be afterwards applied. 4th Blisters

Blisters to the Breast. I have often seen these act in asthmas like a Charm, & Emetics. Acids, Vegetable, or Mineral may be used with advantage, & vegetable food; then can only cure a fit in the disease is the decline of a fit; in this State Tobacco has gained great credit by Curing the Disease. Lastly, warm air. Sir John Hawkins, in his Life of Dr Johnson tells us he could never breathe free unless he was in a warm room or near a warm fire. Here Gentlemen is an Instance of 2 Remedies directly opposite both being useful in one complaint; the Success of either depends on the State of the System is to which it is exhibited; hence much Contrariety concerning the the use of Medicines has prevailed among Physicians from not specifying with sufficient accuracy the particular States of the disease in which they are proper; there has been supposed Contradiction but this is the reason of it.

Before we proceed to speak of the Remedies calculated to prevent a return of the fit it will be proper to enquire in Asthmas a Curable disease? Yes. It has been cured by the following accidental Circumstances. 1st Pregnancy; many have been Cured by this. 2d By the Change wrought in the System

by the Expectation of the Menses. 3d. By a new disease
uppeting the System; the Morbid action in one part
being so strong as to overcome it in another. 4th. By a
Change of Climate; the efficacy of this, last depends on the
nature of the Disease, & the Climate to which the Patient
removes: Thus, in the Pituitary Asthma the Patient
should remove to a dry climate; and in the Spasmo=
dic, moist air should be resorted to. Sir John Floyer
was bold in the City of London (from asthma) on ac=
count of its Moisture. A Case was related to me of
a person who could only sleep for asthma, in a Cave
in the Island of Providence, for its moisture. One
reason why City air is favourable to Asthmatic
Patients is, its great Moisture, & its empreening the
precipitancy of the weather. The Barometer will
tell the State of the weather sooner by half a day in
the Country than in Town. Moisture from boil=
ing a Sponge with water in it before the Mouth
enables Travellers to respire the hot air of the
deserts of Africa. This Moisture is proper in
the Spasmodic Asthma

Dry atmosphere is proper in the Pituitous or Mu
=cous State of Asthma. Lord Shaftsbury was unable to
breath in London owing to its Moisture. Dr Johnes late

of this City was forced to move here from N. York owing to the Moisture of the Air of that place.

Dr Cullen says no Medicines will Cure this disease: He probably formed this opinion from observing only Salt water cases of Asthma. The following Remedies should be tried, 1st Bloodletting where ever Indicated by the Premonitory symptoms of an approaching fit. This is of the first consequence. A Low diet should be also enforced; we should be more or less rigid according to the State of the System. 2d. avoiding all the Exciting Causes. 3d. A Seton in the Side or in the Arm. 4th Cold Bath. 5th. Hard Labour & the Indian mode of life would be perfectly Eradicative if from Mrs Rowly, Which She endured in consequence of being taken Prisoner by them: Where this cannot be prescribed, exercise especially a long Journey should be ordered. The Patient should Sleep on a Mattress. 6th Where the disease has proceeded from the Suspension of an old habit, it should be renewed. I knew a Return to the practice of having Cured a Lady of this disease. 8th Garlic used as an Article of Diet, has been found useful; also Oil of Amber; & Tar in any form, that of Pitch plaster may be used. These Remedies will produce —

much more powerful effects, if used immediately before an expected Paroxysm, as does observed of Bark in the cure of Intermittents. Lastly Change of Climate.

Dyspnœa

differs from Asthma in being Perpetual. It is sometimes accompanied with a Cough. The difficulty of breathing is not so great as in a fit of Asthma. It proceeds very often from the same causes as Asthma, also from a collection of fat in the Thorax, or an effusion of water or Pus in it: Now & then from a Tumor in the Trachea, of which I knew a Case which terminated fatally. (Case) A similar one is related by Morgani. Dyspnœa is often connected with Inflammation or enlargement of abdominal Viscera, Particularly the Liver.

The Remedies are the same as for a fit of Asthma. Bleeding should always be used, but it is seldom Curable.

Angina Pectoris.

This is a Spasmodic disease of the Muscles of the Breast, frequently accompanying Gout, Hysteria & Hypochondriasis; Some there is frequently a Cough attending it. Sometimes it attends Pulmonary Consumption. It differs from

Depression in the Spirit, that no marked appearance of the Lungs can be observed.

It has hitherto been considered incurable. This is because it has been treated Empirically. It is as much subject to Medicine as any other disease. This disease occurs with a State of action. It with great excitement Morbid action: In this State the Pulse is effected; the Remedies here are Bloodletting. I have known it cured by 2 bleedings: Purges should also be used after them; and when there is feble morbid action Tonics are to be used. The Mineral answer best, as Spirit, White Vitriol &c. Epsums should also be used to prevent a return of it when cured.

The next disease of the Natural & Nervous System, is, the

Whooping Cough.

This disease is often Epidemic, & is then evidently Contagious. Dr Sydenham never saw a Case of it accompanied with fever. Dr Cullen frequently found it accompanied with fever of the Intermitting or Gastrical Kind, which is some Cases was attended with Delirium. I have had reason to Concede with Dr Cullen. A few Cases have occured in which I have not found

Symptoms of fever, generally of the Catarrhal Kind.
It is principally confined to Children, tho' I have seen
Several Cases of it in adults. It takes its name from
a Sonorous Cough which sometimes attends, but
I agree with Dr Cullen that the Whooping is not a constant
Symptom. It is formed in Inspiration; frequently it
is accompanied with Vomiting; In many cases it has
been accidently cured by change of air: of this I knew
an Instance by removing a Child to Germantown, in 3
weeks it recovered. Dr Sydenham Supposed this dis-
ease "Malum pertinacissimum fere insanabile."
I have never lost but 3 patients in it, & in one other it
terminated in Pulmonary Consumption; the other
2 died in paroxysms. It is true I have never En-
tered a Case of it, but I think I have prevented Death
in many, & this is all we can do in Small Pox.

The Remedies for it are, Bloodletting if it
Commence with much Morbid action; this is cer-
tainly prosperous: we must pay attention, in our pre-
scriptions of it, to the age of the Patient, State of the Sys
-tem, Season of the year &c. 2dly Vomits of Ipecac, Spi
-ecuanha, Tart Emet. &c. 3dly Purges of Calomel & Jalap,
are prosperous if we cannot use the above remedies. 4thly
Cold Air. 5thly Fear. I have known it Cured by

by placing Children on the back of a Snarling bear. I was thus Cured my self. It is Strange the Dr Coul-
-lon Should have called fear a Tonic in this Case. It certainly acts as a Sedative reducing morbid action

After Great morbid action is reduced by —
then means, Stimulants may be used, as Opi
-um. If Convulsion attend, Oil of Rue &c is to be
used, Garlic, Fruit &c &c. Some have used
Cantharides, but of this I can say nothing of my own
experience. Sacharum Saturni has been used with
advantage. I think it might be useful in Small
doses. Certain Stimulent applications to different
parts of the Body, as Pitch also Blisters to the Neck
Neck & Side; bathing the Sick with Rum in —
which Garlic has been infused, is a Remedy used
by the good Woman with advantage. Exercise,
but above all Change of air. Dr Coulon has known
it cured by 2 or 3 Alternations from Town to Coun
try. Also Bark &c. The Disease continues —
Commonly for 6 weeks; & many Superstitious
Remedies are used for it. Shun the advice of a
woman who has never changed her Name, of a
man who rides a Spotted Horse &c.

Yours

Lieut —

Lecture 60th

The next Disease in order is

Tetanus.

This is a disease Principally of the Nervous System: It is rarely & feebly that the Arteries are affected. The Seat is the Muscles Generally, which I include in the Nervous System.

Tetanus is divided into 1st Emprosthotonos, when the Contraction affects principally the Muscles on the fore part of the Body, & the head is bent forwards. 2dly Opisthotonos, when the body is bent in a contrary direction, backwards. When by the contraction of the muscles closing the Lower Jaw, this is Locked, the Disease is called Trismus. For a more particular description of the disease, I refer you to Dr Cullen. I never saw a Case of Emprosthotonos.

The Pulse in Tetanus is commonly Natural. According to Dr Lining, it sometimes is as low 30 or 40 Strokes in a Minute.

The Predisposing cause is Debility.

The Remote causes are anything capable of producing Debility either direct or Indirect, as working at hard Labour, Parturition (long protracted), Application of heat to the

Body, hence it more frequent occurrence in Warm Cli-
mates & Warm Season &c.

Its usual exciting causes are cold applied to the body after it has been exposed to heat; Hence it is frequent-ly seen in Madras according to Dr Girdlestone, by Soldiers sleeping on damp ground after a warm day; he says further, it is often produced in Soldiers who exposed them-selves to a Stream of Cold air when they are warm. The Chickens die from the Moisture of the Earth & con-sequent Coldness at Madras, which are confined all Night in Coops not raised to a certain distance from the ground Dr Burton of South Carolina says it is frequently excit-ted in the Negroes by Cold when their bodies are heated.
The 2d Exciting cause is Terror, from this cause it is sometimes induced in Soldiers. I heard of a woman in whom it was produced by the Terror occasioned from seeing a Girl tread on a Nail. 3d Worms, & other irritating Substances in the Alimentary Canal. Mor-gani relates a Case from Worms. I have known it from the Thickness of the Meconium in the Bowels of Infants. 4th It is sometimes produced by certain vegeta Poisons, as Hemlock, Datura Stramonium (Henbane) &c.
5th It is sometimes a Symptom of Fever, & occurs in Gout.
6th It also occurs in the disease from the bite of a

Rabid Animal: But, Lastly, it is most commonly
bro't, on by wounds of Tendons or Nerves; not only in these
but also in other parts of the Body, contrary to general be-
lief. There are many other Injuries that excite
it, as 1st. Gun shot wounds & Fractures. 2d. Amputation.
3d. a Nail run into the foot & hand. 4th. From Injury to
the foot be frost. 5th From Injury by stumping the
Toes in walking & from Shackles. 6th From cutting
a Nail too close to the toes. 7th Also from cutting a Corn
too close. 8th From wearing too tight Shoes, & thus abra-
ding the Skin, from Corns on the Toes. 9th Paralysis —
from a wound not more than the Eighth of an Inch deep
in the Forhead of a Man in Charleston S. Carolina. 10th
It has been caused by cutting the Nailed thing with dull
Scissors. 11th From a Broken bone being set.
12th
13th "

One Lastly from the Sting of a Wasp on the Glans
Penis. A Case from the 12th Cause occurred in the
Pensylvan Hospital.

Between the time of the action of the Remote
Cause, & the appearance of the Disease, there is an inter-
val continueing from one day to a week. In one of the
Patients in Dema-r.... it was excited the day after

the Remote Cause was applied: In the Negroe in whom it proceeded from a Wound in the Forhead, it appeared next day after the accident happened; On the other hand, when the disease was produced by running a Nail in the foot, it was 6 Weeks before it occured. When the disease proceeds from Wounds, I have seen the exciting a Moderate degree of Inflamation attend, tho' the Wounds were healthy before the Tetanic affection came on. It occurs in new born Infants, from the Stimulus of the Meconium in the Bowels, here a Purge will prevent the Disease, which is Incurable When it appears. The Falling of the Jaw, or it is called in the West Indies, is Tetanus from this cause. It occurs then principally among the Negroes, Rarely among other Children; the Reason of this is, that they are exposed more to Cold & other Exciting Causes, of this disease, as, first, Cold air, Cold Water & after heat.

2dly . . . . . 3d.

From the acid Meconium in the Bowels; & Lastly to cutting the Navel String with dull Scissors, as Wounds from blunt instruments are most apt to produce the disease. These are the Causes which most commonly produce the in Children: But they are moreover exposed to more 7 the 14 Causes above

mentioned than Adults.

It has been asked why is the Temporal Muscle the part most affected with Tetanus? I answer, the Muscular & Nervous Systems are an Unit; anything which acts on one part affects the whole, unless one part is more debilitated than the other; Now this is the case with the Muscles of the Jaw; it is weaker than the other Muscles of the Body, by being seldom used except when we are eating; of course it is more liable to im= pression than any other part. How Gentlemen is an explification of Old Dr Hoffmans opinion. "Atonia Gignit Spasmas."

The Premonitory Symptoms of Tetanus are, a Stiffness & Rigidity of the Muscles of the Neck, with a disposition to bend forward; Costiveness, pain in the Lower part of the Stomach: In the last a dose of opium or an Emetic will prevent the fit, as also other strong Stimuli; also the Inflaming the Wound will, if it proceed from one prevent Tetanus; it may be done by Spanish Flies, Common Salt Corrosive Sublimate & in the Worst Index Lime Juice is used with advan= =tage: for the same purpose, Inflamation is not ea= =sily excited, tho' When the disease is formed, a Morbid action is present. Stimuli should also be used in

the forming State of Tetanus from the usual remote causes of Continued ~~Intermittents~~; but we must desist when the disease is completely formed.

The Remedies now used in Tetanus, are wholly of a ~~stimulating~~ nature Kind. Opium & many others are exclusively relied on; & success in the use of it is ~~exceedingly~~ rare, as Morbid action is too great to be thus overcome: Bark, Wine, Oil of Amber, Eating &c are in use: I adopted this practice long ago, & added to My list of Stimuli; But in Spite of My Unexpectant, I continued unsuccessful; I concluded it proceeded & proceeded from my imperfect Theory of the Disease, (that it consisted in debility, & that Medicines were to be given calculated to cure the debility.) But the Proximate Cause of the disease is not debility, but Morbid action, And as I heard of Cases cured by bleeding, I adopted that Remedy & used it twice, without effect, perhaps because I was called too late. The System in this disease is so prostrated, that Bloodletting cannot do good: What ~~—~~ May not be the effect of a very copious Bloodletting, as 100 or 200 Z. I cannot say; probably it might be successful: But this large depletion has not yet been tried. Calcd is another Remedy of perhaps greater efficacy. —

Mr John Hunter had a high opinion of Cold in Tetanus. He said in his Lectures, that if he were attacked with it he would fly to Nova Zembla, or throw himself into an Icehouse. The efficacy of it depends on its destroying Morbid action, perhaps it might be very usefully employed, by the application of Cold air or Cold water, it might be carried to so great an extent as to Equal that of Nova Zembla, or an Ice-house, if the Prejudices of Patients would admit. I had a Case in Consultation with Dr Cheyne in which a great degree of Cold was applied Constantly, but the Man died. When the Disease proceeds from worms or other irritating Matters in the Intestines or Stomach, Vomits & Purges should be administered; and also if it be a Symptom of Intermittent Fever: they have act by producing . . . . . Stomach & bowels.

By these Remedies having reduced Morbid action, we are next to overcome the action by Fever, & endeavour to dispose action from the Muscles to the blood vessels, or all over the whole System, & to produce healthy excitement in the System Muscles. The Medicines here proposed are, 1st Opium from 10 to 20 grains may be given daily. 2d Oil of Amber, this appears to act Specifically on the Muscles; may be given from 6 to 8 drops every hour. 3d Wine, this should be given in

large quantity, by Quarts, or even Gallons: Dr Currie in Liverpool cured a Patient by making him drink a Quarter Cask of Madeira Wine. 4th Ardent Spirits, this acts more powerfully & quick than Wine & is to be preferred. Dr Quick in Boston cured many Patients by this Remedy; when he was asked why he prescribed it he answered, Because he had observed drunken men always have their Jaws loose. 5th Bark in large doses should be given. 6th The Cold bath; Dr Wright performed many cures by this Remedy, when the Disease occured in form of fall of the Jaws. When Spasms occured, he dashed a Bucket of Water over his Patient & relieved him. This Remedy proved successful in a Girl in N. Jersey in whom the Disease occured in form of Opisthotonos; She was blind & Dumb from the Disease, & a few Buckets of Water dashed over her, cured her effectually. Dr Girdlestone says the Cold bath proved fatal in every case where it was used in Madeira; the reason is obvious, from the extremely debilitating effects of the Climate the Cold was unsuccessful; but when the action is in a more powerful System, as here, the cold does not produce debility, but merely abstracts the excessive Excitement of the System. 7th Mercury, should be used in this Stage of the Disease,

it has often cured it: It is not often that Mercury will affect the mouth in Tetanus. 8th Blisters should be applied: Dr Girdlestone says he never saw the disease prove fatal when the Blisters even excited an Inflammatory Redness on the Skin. Inflamation might probably be excited by other means & prove equally useful, as by hot water; where Medicines cannot be exhibited by the Stomach on account of the Trismus, it may be done by extracting one or 2 teeth, or if this cannot be done, the Mouth must be forced open. A Celebrated Dentist has invented a very good Instrument Machine for this purpose.

The Jaw fall, or Trismus Nascientum..... is always fatal; I have never known a Recovery; But it may always be prevented by giving the Patient a Purge a day or two after Birth.

I have now delivered to you all I know on the subject of the Remedies proper in Tetanus.

I will now read you a Letter from Dr Brown Professor of Medicine in the College of Kentucky. a Man of the greatest Respectability. After a few observations on the importance of freedom of opinion in Medicine, he proceeds, "Having divested myself from the effects of fear from Medical Tyranny, & Having

in vain tried Opium in a Clyster, in which Mercury had no effect, and all the Remedies mentioned in your publication; I prescribed the Tincture of Cantharides, in a dose sufficient to produce the most violent Inflamation in the Bowels, Stomach, & Urinary passages, the Patient, (a woman) discharged much blood in consequence, from the Bladder & by Stool; but this could not have been sufficient to have produced the good effects by elimination: She recovered & now enjoys good health.

No Gentlemen, I do not suppose the Blood discharged, could have any influence on the disease. I have offered an Illustration of one of the Principles contained in our Therapeutics. That of Morbid action in one part relieving Morbid action in another. Here action in the Alimentary Canal relieved it those in Muscles.

Another disease to be considered under this head is

Palpitation of the Heart. For a description of this Disease I refer you to Cullen. It sometimes proceeds from Aneurism of the Great Arteries, Aorta or Pulmonary near the Heart, or (in our Case) from obstruction of the Artery. It is frequently attended with a difficulty of Breathing. It is not curable from either of the above Causes, & is only to be suspended by occasional

Bleeding, Temperance, & Equanimity of Mind & Temper.
The Pulse in generally in this Complaint What I have termed, Aneurismatic; this pulse is so peculiar as never to deceive you if you have once felt it. By the above Palliatives Patients may pass their lives with tolerable ease. I know a Lady in N. York who has had the Complaint many years. It comes on whenever she uses violent Exercise &c. It is often a Symtom of Fever, as Yellow Fever, & I formerly mentioned a Death to me by Authority of Dr Rollo. It is often the effect of Spasm, & the Pulse descends to 70 or 80 Strokes a Minute: here the Pulsation is entirely Resident in the Arteries; the Heart is in a State of Syncope, & does not act. I mentioned a Case of Palpitation of this Kind, which occurred in Dr Reid, when, from the noise mentioned, he was induced to suppose some one at his door. Dr. . . . Relates a Similar Case. In some the disease has continued so long & violent as to raise the Sternum sensibly from its Natural Situation.

It yields in all these Cases to Blood-letting, Gentle Purges, & afterwards Tonic Medicines.

It often occurs in Epilepsy & Hysteria, here also it yields to Bloodletting.

Hiccough. This is a Convulsive motion of the Diaphragm, occuring after Laughing; and when the Stomach is distended with food or wind. Dyspepsia are very apt to occasion it, from disengaging wind. It is worth a Symptom of General fever, tho sometimes a General disease.

Whenever it is attended with great Morbid action of the diaphragm, Bloodletting should be used. 2d Fear. this frequently Cures it, hence Schoolmasters frighten Children to Cure them of Hiccough. 3d Oil of Amber is an Excellent Remedy, 5 drops every 2 or 3 hours. Where depletion is unnecessary; Ginger, Calamus, & other Stimula may be used with advantage. Nine Swallows of boiling hot water cures it; Porter, Laudanum, Theriaca Plaster.

Lecture 6th

The next Disease is, Chorea Sancti Viti. St. Vitus's Dance. This disease is principally confined to Children. It commonly affects, like Hemiplegia only one Side with Convulsive motion. I never saw it affect but one adult, & that was a woman of 70 years of age.

The Remedies are, Bleeding, Purging, Tonics, & particularly Diet.

We proceed now to Dyspepsia, as the first of the diseases of the Alimentary Canal, which also includes Cholic, Diarrhoea, and Costiveness.

Dyspepsia is originally an affection of the Stomach; but the Arterial & Nervous Systems are affected also. It is defined by Dr Cullen a want of appetite, sometimes a Vomiting, Sudden & Transient, Distensions of the Stomach, Eructations generally acid, Heart burn, Pain in the Region of the Stomach, & a bound Belly. All these frequently concur in the same Case.

The Causes which produce generally indeed this disease, are, Such as act Directly on the Stomach & Alimentary Canal, or, Indirectly thro' the medium of the whole System. Among the first is, the Habitual use of strong Tea, Coffee, & Certain other articles of Diet; also the habitual use of Opium, & other Medicines, as Bitts, Tart. Emet. Tobacco, Ardent Spts. The frequent use of Acid Aliment, & such as Readily undergoe the Acetous Fermentation: Hence the frequent occurrence of this disease among the Germans who eat Sour Krout. Or 2dly Such Aliments as act by over distention of the Stomach, Frequent Repletion of the Stomach with Aliment. 3dly Frequent Repletion of the Stomach with Cold Water and other Liquors. The practice of drinking Cold Water in the morning.

is very unwholesome; it acts by debilitating the Stomach; also
cooled water in too large quantity at any time. 4th Swallowing
aliments without sufficient Mastication, commonly called bol
-ting, has produced this disease in many persons: It is
done by Men of Great Business, Intense Study, & also arises
from bad Teeth. Vomits frequently used have been known to
produce Dyspepsia. A secretion of Saliva from the Practice of Chew
-ing or Smoking Tobacco, by the intemperate use of ~~Segars~~
Sugar. I knew it exercised from this Cause in a Grocer
who was obliged to taste a great many pounds in a day. Hufeland
relates a Case from the same Cause. I have known it produced by
the excessive use of Nitre, in Cases of Pulmonary Consumption
Nitre never produces this effect in acute diseases, but in Chron
-ic, it should not be used in too great quantities.

Those Causes which act Indirectly on the Stomach, thro'
the medium of the whole System are, in the first place, In
-dolence, Vacation of Mind, Excess in Eating, drinking & Venery.
frequent Intoxication, Moist & Cold Air, Sailing & Pregnancy.

The Predisposing Cause of this Disease is debility: produced by
any of the above Causes; this creates Morbid action in the
muscular fibres of the Stomach, with all the Symptoms before
enumerated as Gastrodynia, Eructations, Heartburn &c. are
all the effects of this Morbid action in the muscular fibres
of the Stomach. There appears to be a wonderful

accommodation in the Stomach to the Quality & Quantity of food in health; In Diseases however this does not obtain, & great attention must be paid to these circumstances & to the heat & Coldness of it. 6 2d Remark that has present it only is, the great connection of the Stomach with Life. D Cullen called the Stomach Emphatically the ..... of the Nervous System. Not only our pleasures & pains depend on the State of the Stomach, but even our Virtues & vices; hence a Respectable Clergyman advised never to preach before Breakfast. Lord Chesterfield says the Duke of Marlborough so well knew this part, that he says if he were to fight a Battle for the Empire of the World, he would choose for his Army, if to be composed of British Soldiers, English men with full Stomachs, Irishmen Drunk, & Scotch men with no food in their Knapsacks. Cardinal ..... gave further & better Solicitations to make a motion in Parliament before Dinner: for the same Reason I would advise never to present a Subscription paper for a Public or private Charity without being sure of your Patron having Dined. Perhaps this Custom might be a useful hint in asking a Lady's hand in Marriage! The most frequent Cause of this Disease is Food: Vapid Aliment produces it in many Cases. The Germans are very liable

to it proves the quantity of Sour Rent they are, & the dis=proportionate Exercise they use, for which it is not nourishing enough. I have ready known the dis= ease from the use of Animal food. 2d. The Intemperate use of Ardent Spirits, this is a frequent Cause of the Dys= pepsia from this cause has some peculiar Symptoms; These are, a Vomiting in the Morning before Breakfast. — Some Farmers & Country People call it . . . . Sickness; a Pallid pale somewhat bloated; also tremors & Nausea before a Morning draw gives tone to the Stomach; a peculiarly Foetid Breath, almost Inflammable. A burning Sensation in the Palms of the hands and soles of the feet; a viscidity of Saliva; Swelled Legs. These symptoms frequently terminate in Obstructions of the Vis= cera, Dropsy of the Abdomen, & Emaciation of Legs; Palsy, Apoplexy, Epilepsy, Mania, Death &c. &c.

The Remedies for Dyspepsia generally are, either Palliative or, Radical. The Palliative Remedies are, Mag= nesia, Chalk, Lime water (absorbents to obtund or absorb the the acid in the Stomach & so give easy Action Volatile alkali; this fur= ther does good by its Stimulating powers; Also Common Salt; I have seen a Teaspoonful of Common Salt of great use in palliating the distressing Symptoms of this Complaint: Milk, this is decomposed in the Stomach, it obtunds the acids thereby, uniting with it.

Opium is useful in assisting Digestion & thus relieving it. Many persons in tolerable health, are unable to digest a single Meal, without taking a dose of Opium before (each). Dr Whitt mentions the Case of a Lady who was forced to take 30 drops of Laudanum to enable her to digest her Dinner and fortify her Stomach.

The Radical Remedies for it are, 1st The avoiding & obtaining from all the Remote causes of the disease. 2d Vomit, I generally begin the Cure of Dyspepsia with an Emetic of Ipecacuanha or White Vitriol, as these are supposed also Tonics. 3d Certain Stimulating Vegetables & Minerals, as certain acrid Substances, such as Garlic, or certain Bitters as Camomile, Quassia, Centaury, Colombo, Gentian &c. These Remedies are best Exhibited in water & this should be fresh made every day; their Success depends on their being used in Succession, & Continued a long time. They all exert a specifically different action: Mustard, Pepper, Ginger, Horseradish, Lemon Juice &c. Should also be used, the Last, is best confined to Spirits, but it must be prescribed with Caution; Also Mineral & other Stimulants are to be prescribed, as Elixir Vitriol, different preparations of Iron, Also vegetable & Mineral acids: Proper Iron to any of the Metallic Stimulants, the Tart or Sal Martis may either be used.

The Diet should be accommodated to the disease, this is of the greatest Consequence; it must be in proper

Quantity & Quality, & be taken at proper times. The Quality should be attended to, it may consist of Beef, Mutton, Veal, Venison, wild Fowl; also Oysters, Lobsters, Fish &c. all - more or less stimulant, according to the Nature of the case. The wild Fowl & Soft parts of Lobsters are very proper, as they are easily digested. It should be taken very frequently - two the day, & even when the Patient is awaken in the night; When only like an Idle Schoolboy, it will be doing - mischief; but it must not be too much distended, a Small Quantity Should be taken frequently. As little drink Should be taken as possible, it dispases the food to be thrown from the Fundus of the Stomach, or else impairs digestion by Surrcying the food, before it is - perfectly dissolved into the Duodenum. For this same reason broth is improper as an article of diet, especially if it be made partly of Vegetables. Patients may use Beef Tea in Small quantity. They Should be surprised with an unexpected Dish; Anticipation will destroy appetite if this is not done: It Should be sent him in a Small quantity; he ought never to sit down to the Table with the Family, as the Effluvia will destroy appetite. Horses eat more if a Small quantity be put in the Rack, than if a large portion be given them at once; - Each Kind of food Should be taken alone: Horses eat in a Horizontal posture before he

liver in the Morning; & it is more commonly ~~taken~~ retained on the Stomach when it is taken in this manner. Exercise when it can be taken should be used; Walking 30 Miles a day would probably do good. A Vegetable diet has in some cases cured the disease, when other Remedies have failed. Mr. Hunter advises it in Dyspepsia. I have known one Case cured by a diet exclusively of Red=dish Turnips; Milk diet has sometimes this effect. Butter has generally been considered improper in Dyspepsia: I have not found it injurious: Fat meat & Butter (not Rich) would rather do good by preventing the Acetous fermentation; Dr Cullen says fat renders meat more digestible by interveening between the Fibres; it generally agrees with Children & ought not to be prohibited: If in some Stomachs from a peculiar Idiosyncrasy, cannot bear it, but the same remark applies to Honey & many other articles of Diet. All the books bear witness to the efficacy of butter in promoting the digestion of Fish. —

But the Stomach Stupefied, must be always employed; if Patients loathe in the Paroxysm of the Night, they should Eat: I have even advised some of my Patients to take Meat & bread in a Box, & take it occasionally instead of Tobacco. The Drinks in this disease should consist of Madeira Wine, & Sherry or Porter; if these are not sufficient by

Stimulent, Brandy & water; but this should be allowed with great caution. Dr Fothergill used to Lament in the last moments of his Life, the innumerable mischiefs he had done by alone by allowing his Patients the use of it: he had thus made many Salts. Simple Water of a proper Temperature, or Soast & water answer very well. Where all these Remedies fail, a Salivation should be excited; here the Morbid action is Translated to the Mouth, & the Stomach is allowed time to Recover its Tone. Cathartics must be carefully avoided, for this purpose Aloes or Rhubarb should be occasionally used to open the Bowels gently. Salts, Castor Oil, & other Purges ought to be avoided.

In some cases the Complaint Terminates in Schirrus or Cancerous Tumors, & how the Patients die in great distress.

In the Cure of Dyspepsia from Strong Drink, it is sometimes necessary to use a Specific Treatment. It has been recommended to break of gradually from the use Ardent Spirits; but this is improper, it should be immediately Relinquished. This may be accomplished in the first place, By exciting an unpleasant Association of Ideas & Notions as By adding to the Spirit, unknown to the Patient, Tart. Emetic. This I have known produce such an aversion to Strong drink in a Negro Servant, that he could not for 2 years bear the sight or smell of it.

I knew another Instance in which Drunkenness was cured by infusing a Snake in Brandy: The Idea of it ever after excited such Horror, whenever Rum was presented, that it almost sickened the Man to look at it. I knew a Boy affected in the same manner by Tartar Emetic in Water Melon which he stole. Moses was well acquainted with the influence of such Associations in the Cure of Vice, hence his wisdom in ordering the Israelites to drink a Solution of the Golden Calf; probably made by Hepar Sulphuris. — The nauseous Taste of this Solution, excited so unpleasant an Idea with Idolatry, that it perfectly cured the Israelites of this Vice. 2d. The Smell of it has cured the Love of it in Some, I have known of (cases) — 3d. This Love for Ardent Spirits has been Cured by exciting a Counter Passion. I know a Man who, in order to let a drunken Wife Kill herself by Liquor, bought a Quarter Cask of Rum and contrary to his usual Custom. Left the Key of the Cellar in the Door; his Wife Suspecting his intention, determined to frustrate, & never drank a drop of the Rum! Here the Horrides of the Counter Passion was Stronger than the Love for the Liquor, & She Cured "per Spite" a Sober Woman. 4th By Substituting other Liquors in the Room, or an infusion of Bitters &c. I have known this Cure in 2 Cases. 5th By destroying the Association of Notion; Some persons are

in the habit of taking a dram in the Morning, others at Noon, & some at Night; While some drink only in certain kinds of Company, some only at Certain days of the week. as Country people & Servants, only on the Morning of Market days. Some only at a particular Season. How the Association should be broken, by preventing the Patient from going into the place & Company where he usually Drank, or by preventing his drinking at the usual hour, place, Day &c. 6th By abstaining from Spirits in every form. Dr Letsome says it should be abstracted gradually, I say it should be done at once. Touch not! Taste not! Smell not! Should be inscribed on every Vessel Containing Spirits. — The Stimulus of Laudanum may be substituted if necessary, for a short time; but the Opium had better be given in a Watery Infusion. Its use may also be prevented by the person making Solemn oath not to touch ardent Spirits. By Some thus effected I have known Instances; but When the Oath was taken for a Certain time, I have seldom seen much good resulting from it. (Case) But Lastly, Religion: The aid of Religion should be had recourse to, & seldom fails to effect a cure. Many hundred souls have been cured by the Religious Institutions of the Methodists. If Christianity had nothing else to Recommend it than these Salutary

establishments, they alone would be sufficient to recommend it to our Belief, & its Regulations to our Practice!

The next disease of the Alimentary Canal is,

Cholic. Of this I treated when it occurs as

an Intestinal Fole of Fever, or Bilious Fever turned upon the Bowels: When this is the case it may be known by being first preceed by a Chill. 2dly By its being alternated by a discharge of Bile upwards & downwards. 3dly By its being accompanied by Febrile Symptoms. Sydenham observed long ago, that Bilious Cholic is preceded by a Chill. The Disease we are now treating of is not accompanied with action in the Arterial System, but is simply Morbid Action in the Muscular fibres of the Intestines.

The Symptoms of it are a Kind of twisting of the Intestines about the Navel, a Vomiting, obstinate Costiveness, Cold feet &c. It is usually called Cholica Pictonum, or "Dry Bellyache" & in some cases Faeces are discharged by the Mouth: This disease is then fatal, I have never known but one instance of a Recovery after it. — it is called Miserere Mei.

The Causes of it are, 1st It is a Symptom of Gout. 2dly It is produced by certain Aliments of a Crude Nature.

as Cabbage, Sour Krout Brittle Meat Fat pork &c &c. Also by fumes of Lead. 3d It is induced by diseases of the Abdominal Viscera, as the Kidneys Liver Spleen &c.

When it proceeds from a disease in the Liver it may be known by the Patients Inability to lie on the Sound Side: When from a Disease of the Kidneys it may be known by the altered Secretion of Urine. 4th It is sometimes a consequence of Ruptures, Umbilical ones every now & then in Women, & are the most suspected causes of this troublesome Complaint.

The Exciting Causes, are, most of the Remote just now enumerated, also Exercise, Cold feet, Passions of the Mind, Tight Shoes &c. The Premonitory Symptoms are Cold feet, Wakefulness; Use a Purge, or moderate dose of Laudanum, will prevent the Formation of the Disease.

The Cure of it is divided into 2 parts, 1st To Cure the Paroxysm, & 2d To prevent its Recurrence, or, if I may use the Term, to relieve the Cholicky Diathesis. The Proximate Cause in Spasm of the Disease is Spasm, (Tonic or Clonic) Where, in the predisposing Debility, the Purge or Opium is not given, & the Disease is formed, the Remedy is Bloodletting. — What! bleed when there is no Inflamation! No Fever! Yes bleed to

prevent Fever, to prevent Inflamation: Recollect what Morgani says of Patients dying of the Disease, attended with violent fever, & exhibiting no marks of disease in the Intestines, That disease may exist in such degree as to produce Inflammation, Now this is oppertunally prevented by bloodletting in the early stage of the disease. It should be used therefore, Whenever great Pain attends, to prevent Death: But also we see the good effects of Bloodletting in mitigating Diseases of the other Viscera, as Liver Kidneys &c? When no fever in the System is present? Where however, Pain is not violent, or has been reduced by Bloodletting, Opium may be used, combined with Asafoetida in small doses. Dr Quin says it is more oppertunal when thus used, it is more liable to relieve Pain.

Laxative Medicines should also be used, also Glysters; Water impregnated with Tobacco smoke has been used with success as a Glyster. The Glyster should be a Copious one, & it then acts by distending the Bowels. 2 or 3 lbs. should be used. They relieve also if Intro Susceptio be present, & Relaxes the Spasm. (Keen.) Glysters also of Lead Water may be used. Gum Guaiac. ℥ii dissolved in 4 ℥ of Water is used in the West Indies with advantage. Calcd Mercury

has been Recommended, I have never seen it used with success: I used it in one case without advantage. 4th The Warm Bath should never be neglected, or warm water applied to the Abdomen. 5th Blisters should be applied to the Breast, Thighs, & Ancles; these are often used with advantage: this depends on the great connection between the Skin & Bowels. Dr Thirsy has very properly called them Antagonist Muscles. 6th Relaxing warm & Stimulating applications to the Abdomen, as Cataplasma Lenitivum, & even warm water, & friction may be used with advantage with the dry hand. 7th Cold water all over the Body; it produces reaction & a determination to the Skin. For a Cure & the efficacy of this see my Mss Essay. Dr Baxter of South Carolina informed me of a Case in which it was used with great advantage. When all these fail, 8th A Salivation should be excited, this is a Certain remedy, determines morbid action to the Mouth & relieves the Bowels.

PROGNOSIS. Favorable Symptoms are, open Bowels, discharge of Urine after an absence of it. 4th A discharge of Worms. 5th A great degree of Sensibility on the Skin of the Extremities with a kind of Soreness, this seldom fails to come on

if Sufficient depletion. Especially Bloodletting has been used.

The Prophylactic consists 1st. in avoiding all the Remote & Exciting Causes. It is of consequence too to guard against Costiveness. A favorable Medicine for this is called the Three Tartars, consisting of Equal parts of Crude tartar, Cream of Tartar, & Salt of Tartar. Take a Teaspoonful 3 times a day. 2dly A Diet & Uniform Aliment. The Marines in England, who live principally on Fat Pork escape it, tho exposed to the fumes of Lead which is a frequent Cause of the Disease.

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NOTES ON
RUSHE'S
LECTURES

VOL. III